

Indian Studies



दिल्ली विश्वविद्यालय ग्रन्थालय

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पुस्तक विद्यालय ग्रन्थालय

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FOREWORD

THESE studies of India first appeared in the *Mizan* Newsletter of India, a series intended to give foreign readers a picture of various aspects of Indian life, in the light of the latest information available. A number of these have now been collected in a single volume in the hope that it will form a convenient introductory book about India.

A great mass of books have been written about India, many of them the fruit of profound scholarship and years of research. Many of these books are, however, too detailed for the general reader, since they are written by specialists on some particular aspect. Moreover, events in India are now moving fast, and social and economic changes are taking place at an ever increasing speed, so that there is always a danger of books on India becoming out of date. There is room for a general book on India which will provide brief, clear and concise studies of the background of the modern Indian scene for the general reader.

While "Indian Studies" makes no claim to original research work, the standard works of scholars and historians have been carefully consulted; it is to these that the serious student of Indian affairs should go for fuller information. The author has, moreover, had the advantage of being able to draw on the best authorities in almost every sphere. These studies have been submitted to the appropriate experts, many of whom are officials who have spent a lifetime dealing with the subject under discussion, and their suggestions have been incorporated into the studies. It must be said that at times it was almost impossible to find any authoritative source from which accurate information could be obtained. In so far as it is available, what is presented in this book is the best and most up-to-date information about India.

The author would like to take this opportunity of thanking the experts—Government officials, military officers, non-officials—too numerous to mention individually by name, who have spared precious time to read through the manuscript and offer their criticism and advice. Without their co-operation it would have been impossible to bring out the present volume.

THE PEOPLE AND RELIGIONS OF INDIA

India is vast. It is so big that all Europe except Russia could be fitted into it. It takes six days and five nights to travel by train from North to South, and four nights and three days from East to West. It has a population of 388,000,000—one fifth of the human race.

What strikes the observer first is the great variety of the people of India. There are great differences of race, appearance, language and religion. It is this variety that makes the country so interesting, though at times confusing.

There are many different races in India. This is because India has often been invaded in the past, and each race that settled there has left its mark on its descendants of today. There is no such thing as a typical Indian. In the South and in some primitive hill tracts you find the descendants of the first races to inhabit India, small very dark people, distantly related to the African negro. In the north are tall, fair-complexioned people, descendants of later comers. But by now the races are so mingled that you may find almost every sort of stature and shade of complexion all over India. The languages are as varied as the races. Over two hundred languages are spoken, some by whole Provinces, and some by only a handful of people; and each of the major languages has its own script. Hindustani is the *lingua franca* of the North, as most of the Northern languages are related to it. But in the South a number of languages are spoken which have hardly any relation to the Northern languages. If North and South wish to communicate with each other they do so in English, which has become the common language of the educated classes.

India is a country of many different religions. It is sometimes said that India is the most religious country in the world. It cannot be said that Indians are more or less saintly or spiritual than people in other countries; but it is true that both the daily life of the individual and social relationships are governed very much by religious customs, and even political life is based to a large extent on religious divisions. We cannot understand Indian affairs without some knowledge of her religions.

The chief religion is Hinduism, which is professed by two-thirds of the people. Hinduism is a very ancient religion which began as a form of nature worship in which the forces of Nature were personified as gods and goddesses. But in course of time it has taken into itself

many beliefs and customs from other religions, so that now it resembles an old palace with many rooms and passages, in which it is hard to find one's way. In some senses it is as much a social system as a religion for anyone born into a Hindu family is regarded as a Hindu, whatever his personal beliefs. It can be said, however, that all Hindus believe in the transmigration of souls, that is why so many Hindus refuse to take animal life and are strict vegetarians. The feature of Hinduism which most strikes the observer is the caste system. By this system society is divided into a number of hereditary groups, each having some task in the community, there is for instance a caste of priests, one of merchants, one of weavers, one of shoemakers and so on. A man is supposed to follow the occupation of the caste into which he is born, to eat and drink only with members of it, and to marry within it. Of course, in the changing modern world the system has partly broken down. Progressive Hindus in the towns have thrown off all caste restrictions. People do not always follow their old caste occupation. In the villages they usually do but in the towns they will follow almost any occupation which brings them money. But most Hindus still keep the old rules about eating and marrying only within their own caste, so caste continues to break up Hindu society into a number of separate groups. Caste, moreover, has created the problem of the outcastes. There are some forty to sixty million outcastes, known as the untouchables or Depressed Classes. On them fall the more menial and dirty tasks of the community. They are in one sense outside the Hindu system in that they are denied all the privileges of the higher castes, yet at the same time they are part of it in that their labour is essential to the social structure which would collapse without them, and that they have on the whole accepted the low position assigned them by the higher castes. Under the impact of modern ideas about the dignity of man, they are beginning to assert themselves and to establish themselves as a separate community from the Hindus.

The second great religion of India to which 95 millions belong is Islam. It will be appreciated how different many of their ideas are from those of the Hindus, they believe in only one God, they believe in the brotherhood of man and have no caste, they do not believe in transmigration of souls and eat meat freely. It is no wonder that there are sometimes misunderstandings between Hindus and Muslims and unfortunately their differences have been seized on by politicians to keep up a purely political quarrel. But on the whole Hindus and Muslims have lived side by side and tolerated each others' customs for hundreds of years, without serious difficulties. This is especially true of the villages, where Hindus and Muslims have the same simple way of life. The most progressive and enlightened Indians of the towns, too, have risen above all such difficulties, they meet together freely in society, and work together for the common good of the country.

There are a number of other religions as well. Christianity, with 7,000,000 adherents, is the third biggest group. The Sikhs, with nearly

six millions, are famous the world over as great fighters. Their religion began some four centuries ago as an attempt to modernize Hinduism under the influence of unitarian ideas, and their sacred book is noted for its eclecticism. Nominally they have no caste, but in practice they follow Hindu customs in such matters as marriage and personal law. The Parsees, a small group, are descendants of Persians who fled from religious persecution many centuries ago and found a home in this hospitable and tolerant land. Like the Jews, they are excellent business people, and they have contributed much to the prosperity of Bombay, the greatest commercial city of India. There are also a few thousand Jews and Armenians.

To the outside world this matter of the different religions and communities in India seems to dominate Indian politics and to divide India hopelessly. Politics fill the newspapers and get more attention than they perhaps deserve. India is more of a unit than would appear from the newspapers. The past century has brought her two things she never had before : a single government and a long period of internal peace. Under the surface stir of politics, the administrators (both British and Indian), the business men, the professional men and the workers go on steadily building up the modern India.

India is a land of contrasts, of the old and the new. The pylons of great hydro-electric schemes cast their shadows on fields tilled by the wooden plough ; aeroplanes roar over villages where the spinning wheel is still in use. While famous Indian scientists, some of them Nobel Prize winners, are honoured by the whole civilized world, the illiterate Indian villager still hangs charms round his bullock's neck to avert disease. Indian girls in slacks drive their sports cars past old palaces where their veiled sisters live in strict seclusion. But out of this medley of old and new, a great new nation is struggling to come into being ; a nation which, not forgetting her ancient past, is renewing her greatness on modern lines. The study of this Indian renaissance is of absorbing interest and world significance.

INDIAN VILLAGE LIFE

The outstanding fact about India is that it is a land of villages. There are 700 000 villages in India with an average population of 450—nine out of every ten Indians are villagers and of those nine seven are agriculturists. To understand India one must understand Indian village life.

The Indian village has been surprisingly little touched by modern influences. Modern conditions have affected their economic structure somewhat. In olden times villages were self-supporting economic units but with the improvement in communications in the past century many have ceased to be self-contained and grow at least some crops for the market. But the social structure of village life is much as it was two or three thousand years ago and ancient custom still dominates over everything.

Let us first look at the outward appearance of an Indian village. It is a very compact unit. All the houses are built close together with narrow lanes between. This is a protection against thieves and wild animals. The houses are mostly built of sun-dried bricks plastered over with mud. Each house stands in its own compound with high mud walls and a little wooden doorway behind which lives a whole community of human beings and animals. In some districts the budding materials are reeds, bamboos, palm leaves and wood; these are used in rainier districts where sloping roofs are necessary for draining away the rain water. Sometimes a house of kiln-dried bricks and red tiles marks the abode of a village money lender or merchant. In a few more prosperous districts where the standard of life is rising whole villages are being rebuilt in bricks, but such prosperity is rare. The centre of village life is the village well where the women gather to draw water and to gossip. The men too have their place of gathering often a platform under the banyan tree in the centre of the village. Here they pass round the pipe (*Hookah*) from mouth to mouth and discuss the affairs of the village. On the outskirts of the village is the village pond where the villagers bathe, wash their clothes and water their cattle. It is usually far from clean and is a breeding ground for mosquitoes. One lovely feature of the Indian village is its great trees. Nearly every village can be seen from afar by the trees that shade it—banyan, tamarind and mango and in the South the eternal palm tree. They give shade, provide fuel and fodder and yield fruits and spices. Roads are almost always bad. There are seldom proper arrangements for removing rubbish from village lanes which are deep in dust in dry weather and in mud in wet weather. Most villages lie far from motor roads and bad communications cut them off from outside influences.

The social structure, like the physical, is compact, and has been inherited from ancient times. Man is hardly an individual, but a cog in a complicated social machine, his place determined by custom and tradition. The individual is subordinated to the family. The family is usually the large patriarchal group, headed by the old father and mother, with a number of brothers with their wives and children living within the same compound walls. Such a community exercises tyranny over the individual, but it makes for social stability, since the aged, the sick and the unemployed can always be sheltered in the joint family home.

The outstanding feature of the Indian village is the caste system. This system was originally Hindu, but its influence is so strong that something like it has survived even among Muslims and Christian converts from Hinduism, though it is not so rigid as among Hindus. The essence of the system is the division of society into a number of hereditary groups, each having its own function to perform; a man's work is therefore determined by the group into which he is born. All the duties of the village are carried out by separate castes; priests, merchants, washermen, barbers, blacksmiths, leather workers, carpenters, scavengers and midwives (usually the women of the scavengers' caste). Even the headman of the village is often a hereditary official. There is a strictly graded hierarchy of castes, the priest caste being the highest and the scavenger of the lowest. This distinction is kept rigid by the prohibition of inter-marriage between different castes. The village menials, such as the washerman, the leather worker and the scavenger are considered unclean because of the unclean nature of their work; they are labelled "untouchables" and must keep away from the other castes. They may not enter caste houses, use the same well, or worship in the same temples. In North and Central Indian villages they live in a special quarter of the village, on the outskirts. In South India, where the caste system is most rigid, they have a separate village a short distance away from the main village. The system is inhuman but throughout the centuries it has made for social stability. Under the caste system everybody knows his exact place, both in the social scale and in the economic mechanism. Excessive competition is impossible, but it is a serious obstacle to any kind of progress in modern conditions.

Another feature of the Indian village is the *Panchayat* (literally the Council of Five), or Council of village elders. It consists of the senior men of the village, usually the heads of the most important households, presided over by the headman of village. Before the coming of the British with their written laws and their lawcourts, when the village was a self-contained community, the law of the village was unwritten custom and the *Panchayat* administered it. They decided boundary disputes, punished crimes; where land tax was assessed on the whole village as a unit, they decided the allotment of the tax between the different households. The worst punishment was "outcasting", the banishment of a man from the

social life of the village, in a custom-ridden world it was a punishment worse than death

The introduction of modern legal and administrative methods has tended to reduce the influence of the *Panchayat*, but the influence of the village elders is still very powerful especially in relation to caste and social customs, and "out-casting" is still a terrible punishment. Attempts are being made to revive the *Panchayat* and give it certain definite judicial powers; but it is almost impossible to combine this ancient institution, which administers unwritten law by means of social sanctions, with the rigid legal system of the West.

The Indian villager is fundamentally religious. Nature is nowhere more awe-inspiring or more capricious than in India, it is a land of huge mountains, mighty rivers, uncertain rainfall, terrific floods and appalling droughts, and the humble villager, as he goes about his work in the fields, is conscious of the presence of unseen and uncontrollable forces. Often his religion is one of fear, he feels himself surrounded by malignant spirits whose ill will has to be bought off by offerings. Sicknesses of man or beast are regarded as the work of evil spirits. It is this fear of the unknown spirits that has given the priests their extraordinary power, for only the priests know the secret ritual and incantations which can reach the ears of the gods. Religion also enforces social custom, religious sanction has been given to caste and to such customs as child marriage. But the village religion is not always one of superstition and fear, the villager is capable of real spiritual insight and devotion, as his folk music shows. The great religious poetry of Rabindranath Tagore is only a development of the mystical songs of the illiterate village mystics of his native Bengal. This deep sense of the spiritual, however crude and overlaid with superstition it may be, is of the essence of Indian village life.

A glimmer of light is beginning to show. The Indian village, which has kept its main features unchanged for thousands of years, is at last beginning to change. Communications are being opened up, villagers are going to the towns and townsmen are coming to the village. Modern education is spreading, though the percentage of literacy is still very low (20% for men and 2% for women). Political propaganda has been an important unsettling force. The two million soldiers drawn very largely from the villages will return from the War with a broader outlook. Governments have long been working on rural reconstruction, and they plan to settle the returned soldiers on the land and to give them every help in building up an improved and progressive village life. The picture of the Indian village is bound to alter, but the new village must be built out of the elements that are already there. Whatever changes sweep over India in these times of world crisis and change, much of her ancient institutions will survive and will be incorporated into the new pattern.

INDIAN SOCIAL REFORM

All over the world old institutions need reforming from time to time, as they become unsuited to a changing society, or as they degenerate with the course of time. India, with her ancient civilization and her age-old religions and social institutions, has witnessed great periods of social reform, and none more profound that which is going on in the present age.

The great modern social reform movements began in the early nineteenth century. At that time India was just emerging from an unhappy century of disturbance and warfare, after the breakup of the Moghul Empire, and British rule was just beginning to bring peace and order. Her religions were perhaps at their lowest ebb as guides of social conduct. Hinduism had become degraded by many superstitions and rigid customs. The caste system was prevalent in its most rigid form. The status of women was very low; child marriage was common, the dreadful custom of suttee (burning of widows on their husbands' funeral pyre) was spreading. Women's property rights were universally ignored and education for girls was practically unknown. Both among Muslims and Hindus *pardah* was widely prevalent. Religious learning had degenerated into barren controversies over texts.

The first impulse to social reform came from the West. England, which was to influence India far more than any other European country, was then experiencing the beginnings of her own social reform movements, which were inspired partly by a religious revival, partly by the humanitarian movements of the time, and also by the democratic ideas left behind by the French Revolution. The humanitarian ideas which were stirring in England were brought to India partly by British officials, many of whom were men of great humanity and deep religious convictions, but still more by the Christian missionaries, who preached a religion of universal brotherhood and love.

Thoughtful Indians, who were unhappy at the wretched state into which their society had fallen, eagerly welcomed the teaching of the missionaries, and while few became Christians, many adopted the ethical teachings of the Christian religion. The pioneer and perhaps the greatest among them was Raja Ram Mohan Roy, a highly educated Brahmin of good family. While he freely acknowledged his debt to Christian teachings, he sought his inspiration from the most ancient writings of Hinduism, the Vedas, which, he found, did not justify many of the customs prevalent in the Hinduism of his time, but preached a simpler and purer religion. Ram Mohan Roy's social conscience was first awakened when, as a

boy he was the horrified witness of his dead brother's widow being forced on to the funeral pyre. He became a life-long champion of Indian women's freedom. He founded the Brahmo Samaj, a reformed Hindu sect which did not recognise caste, was monotheistic and devoted much energy to social and educational reform. Since his day many Indian societies have been active in promoting social reform. Their activities have usually been directed towards a reformed mode of life for their own members, agitation for social legislation and the promotion of education.

Much of social reform requires legislation and here arises a difficulty. The British, from the early days of their power in India, were pledged to respect the religions of their subjects, and yet many of the social abuses which they, as well as the Indian reformers, wished to sweep away, were regarded as religious customs. But in spite of official religious neutrality, the British did in fact legislate against many social abuses. They invariably met with abuse and opposition from the orthodox, but they also obtained the support of the enlightened, without which their social legislation would have been impossible. Suttie was the first to go by a proclamation of the Governor General in 1829. Orthodox Hindus appealed to the British Government against the proclamation, but Ram Mohan Roy went to England (the first educated Indian to cross the black water) and succeeded in getting the proclamation upheld by Parliament. As India progresses towards self government it becomes easier to use legislation as a weapon of social reform, for the legislatures are composed almost entirely of Indians who are freer to deal with their own social problems than the neutral British.

Much of social reform has turned on the status of women. We have already seen to what an inferior position they were relegated a century ago. The abolition of suttie was the first step in removing the social customs that bound them down. Later came the Hindu Widows Remarriage Act in 1929, the Sarda Act (called after its champion in the Legislature) for prohibiting marriage of girls under fourteen. At the present time there is a bill under discussion for giving Hindu women equal inheritance rights with men, and another for prohibiting polygamy and giving women rights of divorce.

Social pressure by progressive people has further helped to better the lot of women. An important influence has been that of education. Half a century ago it was generally considered that a knowledge of reading and writing would ruin a girl's chances of finding a husband, now at least among educated men, illiteracy in a girl is a bar to matrimony. Christian missionaries were the pioneers in girls' schools, but now Governments and Indian societies of all kinds run girls' schools, and there are also a large number of women's colleges. *Purdah* is no longer so widespread, many women, both Hindu and Muslim, have discarded it, though it is still widely prevalent. Women are coming forward to take an active part in public life, politics and social reform movements.

Another social problem is that created by the caste system. Originally economic rather than religious, the institution of caste has in course of time become sanctioned by religion, and has become so rigid and so complicated that it is a drag on social progress. To understand why many intellectual and progressive Hindus still defend the caste system, we have to take into account the closely related Hindu beliefs in reincarnation and "karma." Karma may be briefly described as the individual's destiny which is the outcome of his own actions, good or bad, and which according to Hindu belief works itself out from one incarnation to another. According to the belief, a miserable lot in life is the outcome of sins in a former life. It is clear that those who hold such beliefs can easily be led to acquiesce in social abuses, as they can be traced to the misdeeds of the sufferers in a former existence, and to feel that social reform is akin to interfering with the workings of destiny. From time to time in the history of Hinduism, reformers have arisen to protest against the caste system. The earliest and the most famous was the Buddha, who did succeed in overcoming the caste system to some extent. But it crept back again, and a thousand years after his death the system was stronger and more elaborate than ever. Another protest, that of Guru Nanak, who was deeply influenced by Islam, resulted in his breaking away from Hinduism and founding the religious sect of the Sikhs. In more recent times egalitarian conceptions have influenced progressive Hindu thought. The position of the untouchables, who are really outside the caste system altogether and hardly accorded the status of human beings at all, has in particular become the object of attack. The Christian missionaries led the attack; they have done much for the education and economic uplift of the untouchables, and of recent years their cause has found powerful champions among Hindus also. Nevertheless progress is slow; caste is so much a part not only of the religious beliefs but of the social fabric of Hinduism that it still has almost universal acceptance, and the reformers have done little more than scratch the surface of the problem.

With the development of industry and of large towns, social reformers are finding new fields of activity. Industrialisation, as everywhere, has brought a fresh crop of problems in its train: problems of industrial housing, of temperance, of beggars, vagrant children and of women in industry. All over India educated people of every religion and race and caste are banding themselves together in social service leagues which try to deal with the myriad social problems of a changing society. One striking feature is the enthusiasm of women who have themselves won emancipation for social service. Some of these societies have done excellent work; for instance, the bulk of the maternity and child welfare work in India is conducted by voluntary societies. Educated people live mainly in the towns, and the social service enthusiasts have until recently somewhat neglected the villages, but now more attention is being paid to the vast problem of the social regeneration of the Indian village.

The task before the Indian social reformer is immense and complex. Some remembering how the Buddha strove more than two thousand years ago for social reform and ultimately failed are sceptical of modern efforts by lesser men but India is now being washed by the tides of great world movements and it is unlikely that she will sink back into her ancient isolation. And none with eyes to see can doubt in what direction world currents are setting.

THE INDIAN CASTE SYSTEM IN MODERN TIMES

India like every other Asiatic country is passing through a period of social crisis. Throughout the East the traditional forms of society are cracking under the impact of ideas of individualism of liberty and democracy and new social patterns are being formed. Indeed much of the unrest in India is not due to political causes though it may take a political form at times but to the stresses of a changing social system.

By far the most important traditional social institution of India is the Hindu caste system. Two-thirds of the people of India are Hindus and come directly within it while all the preachings of Islam and Christianity have been unable entirely to eradicate what may be described as the caste attitude to life even from regions where Hinduism does not predominate and certainly not from the villages.

Caste is so old that nobody knows quite how it began but there is no doubt that its origin was largely economic. There is in every society a tendency for people doing the same kind of work to be grouped together socially and for sons to follow their fathers occupation. Something like a caste system is to be found in every old and static society but the peculiar feature of the Indian system is that these tendencies have been given a religious character so that the economic groups have hardened into hereditary castes which are kept separate by religious injunctions. Another theory of caste is that it was devised as a sort of colour bar. Thousands of years ago India was inhabited by small dark skinned people then she was invaded by successive waves of taller fair skinned races from the North who either overcame and enslaved the earlier inhabitants or pushed them southwards or into the hill jungles. The dark skinned people were despised by their conquerors who regarded them as outside their social system and in order to preserve their purity of race forbade inter marriage with them. It is noteworthy that the word for caste Varna means colour. Probably both theories contain some of the truth and the origins of caste were in fact complex.

According to traditional Hindu theory there are four main castes in society though now each caste is divided into a large number of

smaller groups. These four are : the priestly caste or Brahmins ; the caste of rulers and soldiers or Kshatriyas ; the merchant caste or Vaisyas ; the caste of labourers or Sudras. Below these are the out-caste or untouchables. These are descendants of conquered peoples, slaves, or Hindus who have been outcasted for some breach of caste rules. They do not really belong to the Hindu system at all and are considered fit only for the most servile tasks. One ancient writer has compared the castes to the parts of the body : "The Brahmins are the head, the Kshatriyas are the arms, the Vaisyas are the belly, and the Sudras are the feet." Just as the whole body remains healthy if each part performs its own task properly, so society remains healthy if each caste does its own work and does not try to do the work of the others.

All these groups are kept apart from each other by elaborate rules. There is a strict grading of castes ; a man may not mix with the caste below him, for that would defile him and he would have to go through many ceremonies to be purified. So he may not eat and drink with those of a caste lower than his own. Above all, a man may not marry outside his own caste. All these regulations make of each caste a closely knit brotherhood—almost a "State within a State," which claims the first loyalty of its members.

The position of the Brahmins is remarkable. We must remember that all Hinduism is dominated by the conception of a spiritual world far more real and important than the material world, but to the knowledge of which only the enlightened few can penetrate. According to orthodox Hindu teaching, only the Brahmins can attain this power ; they alone are permitted to read the sacred books, and they alone know the secrets of the ceremonies which can move the gods and bring blessings or curses. Through the ages they have maintained a remarkable influence and are regarded with reverence by the other castes. The Brahmins acquired great political power as well, for they were usually the best educated section of the community, and the rulers were not only under their spiritual guidance but turned to them for help in the administration. The Brahmins have always been the greatest upholders of the caste system, and they have made the elaborate rules that keep it alive.

The untouchables, of whom there are now some 40—60 millions were in the past hardly regarded as human at all. Even now, and particularly in South India, their position is wretched ; they do all the dirty work of the community, the scavenging, washing of dirty clothes, and the handling of dead carcasses. They are regarded as impure ; their touch defiles and they must be kept at a distance. In the villages the untouchables have to live in a separate quarter ; they may not draw water from the village well, lest they defile it, but must wait for some caste person to draw it for them. They may not enter caste houses (except for the necessary purpose of scavenging) and they may not enter and worship in Hindu temples.

All this describes the caste system in its rigidity, where it has been undisturbed by outside influences. In the old days, when most

people lived in villages and life was simple, the caste system was useful because it kept society stable; men took up the work to which they were born and there was no excessive competition. Each caste, moreover, acted as a mutual benefit society, looking after its own sick, aged, and unemployed.

In recent years the system has been shaken by modern influences, particularly in the towns. Two things have helped to undermine it—economic necessity and modern education. The development of modern industry and trade has drawn large masses to the towns. There men take almost any work that pays them, regardless of caste. In factories and trains and buses, all castes rub shoulders together and one cannot ask if one's neighbour is an untouchable or not. Common economic interests are beginning to draw town workers together in trade unions, and new groupings are creating new loyalties. Education throws all castes together; it opens the door to modern ideas. Boys and girls are educated together in the Universities; and sometimes they arrange their own marriages not according to caste but according to their own hearts. Inter-caste, inter-religious and inter-racial marriages are becoming less and less of a rarity.

The position of the untouchables has been greatly affected by modern changes. On the whole they have accepted their miserable lot without question through the centuries, but now unrest is beginning. Under British rule, education is made available to all classes and religions, and in fact the backward classes are helped by special concessions and scholarships. Some of them have become educated and are fighting for the rest. Many have become Muslims and Christians and have acquired a new status. Under the influence of modern ideas, many high-caste Hindus have thrown overboard their caste scruples and are taking the lead in the movement for the uplift of the untouchables.

It would be a mistake, however, to imagine that the caste system is already dead. In the villages, where ninety per cent of the people live, it remains much the same; distinctions are kept up on the whole and each caste keeps to its own work. As an economic system it has been severely shaken in the towns; but as a social system it is still extremely powerful. It still regulates whom a man can marry; inter-caste marriages, though they do occur, are still something of a sensation. Regulations about eating are less strictly kept, and with the exception of a handful of old-fashioned high-caste Hindus, all eat together in schools, colleges, social gatherings and in the Army.

The Brahmins are still a very powerful influence, and many have adapted themselves to modern times. Some of the ablest administrators on modern lines are Brahmins. Some are going into industry and are helping to build up the new Indian capitalist class. Many have become lawyers and journalists and are going into politics. Many of the leaders of the Indian National Congress are Brahmins, (though Mr. Gandhi, curiously enough, is not a Brahmin, but belongs to the merchant caste). Their brilliance and subtlety, and their traditional

sense of leadership still give them dominance in India, at least among the Hindu section.

There have, in the past, been many attacks on caste and the position of the Brahmins. Buddha almost succeeded in breaking it down more than two thousand years ago, but the Brahmins regained their ascendancy. The tide of new ideas that is now sweeping over India is the part of a great world movement, and as long as India remains open to world influences, caste is bound to weaken progressively. Nevertheless, at present it must still be regarded as the most important influence in Hindu social life.

DEVELOPMENT OF HINDUISM

The Hindu religion is very puzzling to the outsider. It is impossible to know what exactly Hindus believe. At one time we are told that Hinduism is a highly philosophical religion, then we hear of innumerable gods and goddesses, and of strange legends and superstitions connected with them. We are told at the same time that Hindus venerate all life so much that they will not eat meat, and that bloody sacrifices are offered at some of the temples. It is difficult to connect all these different aspects.

The truth is that Hinduism is not one belief but a jungle of beliefs. Just as the Indian people are the result of a mixing of the races that have from time to time invaded India, so Hinduism is a result of the mixing of their religions. Moreover, there is a great difference between the Hinduism of the educated classes and that of the uneducated villagers; for the educated, Hinduism is highly philosophical, while for the uneducated it is largely a matter of superstition and magic, though even the villager has a capacity for deep religious insight.

What may be regarded as the basis of Hinduism was the religion of the Aryan invaders of India, who came some four or five thousand years ago. It was a form of nature worship in which the forces of nature, the sun, thunder, fire, and rain were worshipped as gods. They were regarded as benevolent to man and willing to help him if he made sacrifices to them. But there were also a large number of lesser spirits, who were not so benevolent; they were regarded with dread by the common people and their ill-will had to be averted by offerings.

The religion of the people who inhabited India before the Aryans came seems to have been of this darker kind. Nature in India is capricious; sometimes she smiles on man, but often she is cruel and ruins all man's handiwork by drought or storm or flood. No wonder that early man in India thought of natural forces as either indifferent to man's needs or actively hostile, and his religion became a form of devil worship by which he tried to propitiate evil forces by offerings.

The Aryans already had a number of gods when they came to India, so as they spread they simply adopted the local gods and goddesses and added them to their own. The Brahmins became their priests and offered sacrifices to them, in this way the power of the Brahmins was extended and the non Aryan people were gradually absorbed into the Hindu religious system. Another way in which the number of gods and goddesses increased was by the deification of heroes. After their death legends grew round them, they were believed to have magical powers, and in time were regarded as gods. This process still goes on, a popular English governor who died less than a hundred years ago has become a god in parts of the Punjab and is worshipped by some of the villagers.

All this has resulted in a great confusion of gods and goddesses. Some are worshipped all over India, some have only a local importance. They vary in their character and in the kinds of worship they demand. Kali the goddess of destruction, demands blood and is worshipped by the sacrifice of goats, Lakshmi, the goddess of wealth, is worshipped by offerings of fruit and flowers. Some, like Vishnu, the sun god, are descendants of the old Aryan nature gods, others, like Maryamma, the goddess of smallpox are survivals of the worship of evil spirits. The beloved hero gods, Rama and Krishna, are most probably apotheoses of historical kings.

At the same time that the priestly class were ministering to the need for a popular religion, they were developing a highly philosophical religion. From the earliest times they speculated about their religion, and we have the results of this speculation in some of the most wonderful religious books in the world. What was at first nature worship became the worship of one universal spirit, of which the created world is but the outward form. To the highly educated the gods are symbols of natural forces, and manifestations of the divine principle underlying the whole of creation, to the legends loved of the common people they give an allegorical interpretation. We may say that the conception of a universal spirit or world soul is the essential idea of Hinduism. The physical world is an illusion, hiding the spiritual reality behind the veil of matter.

This belief explains the fundamental Hindu attitude to life. The individual human soul comes from the world soul and is destined to return to it and to be absorbed by it, but the soul is divided from the universal spirit by ignorance and the bonds of this material world. The true business of the soul is to seek spiritual enlightenment, release from matter, and ultimate absorption in the infinite. It may be understood that the conception of matter as illusion easily develops into the conception that matter is evil, that the ideal for the human soul is to escape from the world rather than to master it. This negative conception, so widespread and so deep-rooted in Hindu tradition and thought, has the profoundest practical results on social life.

There is another universal idea in Hinduism, that of the transmigration of souls, with which the idea of "Karma" is closely

bound up. The spiritual development of the soul goes on through many lives, and it is only when complete spiritual enlightenment has been achieved that the soul is finally released from the cycle of births and re-births and attains complete absorption in the infinite. "Karma" means that the consequences of a man's deeds follow him from life to life; good deeds in one life will be rewarded by a good fate in the next life. Hindus claim that "Karma" is the only possible explanation of the great differences in human fates and happiness that does not offend against the idea of divine justice. It is also claimed that the doctrine of "Karma" does not lead to mere fatalism, since according to it a man by his own deeds can improve his fate; none the less in practice the notion of karma does lead to a fatalistic acceptance of evil in many cases. The theory has undoubtedly helped to perpetuate such social evils as the degradation of the outcaste and the treatment of Hindu widows, for these are tolerated on the ground that they are the outcome of misdeeds in a former life.

Hinduism has never had a single book of revelation or a single authoritative teaching. It has developed a number of different sects and schools of philosophy. Each teacher can claim enlightenment for himself and gather round him his disciples to whom he teaches his doctrine; in this way innumerable sects have been founded. Many of these sects lay emphasis on different ways of attaining enlightenment and union with the Infinite; others have arisen through emphasis on the worship of particular gods of the Hindu pantheon. But in spite of differences, there are certain leading ideas that mark the Hindu; one is the belief in caste, and the other is the belief just described in transmigration of souls and karma. And the spirit of Hinduism is one; the search for the one truth that underlies all outward forms of creation, the belief in the supremacy of the spiritual, the passionate desire for union with the universal spirit. It is this which, in spite of all outward appearance, gives to Hinduism a strong monotheistic trend.

Hinduism has witnessed many revolts, some of which have led to the founding of new religions, and some to the modification of Hinduism itself. Many of these revolts were directed against the Brahmin priests, who in the past claimed a monopoly of spiritual power. Of these revolts the chief was that of Buddha, which resulted in the formation of one of the great world religions. Later revolts have often owed much to Islam and Christianity. For instance, Guru Nanak, founder of the Sikhs, was profoundly influenced by the monotheistic beliefs and democratic practice of Islam. The great modern reform movements of the 19th and 20th centuries have drawn largely on Christian ethical ideas.

Looking over the history of Hinduism one is struck by its extraordinary vitality and adaptability, and its unique capacity for conquering other religions by absorbing elements from them. Hinduism is changing again under the impact of modern ideas. Education is spreading in India, and as it spreads a more scientific attitude

tends to replace the old unquestioning acceptance of religious teaching. That does little to weaken Hinduism. The revolt of modern youth against old conventions and old authority has brought a certain development of atheism, but for the most part educated Hindus have no difficulty in combining their religion with modern science. In the universal laws of science they see the working of that universal spirit about which their philosophical books have taught them for thousands of years. There is no doubt that it is possible to reinterpret Marxist dialectical materialism in Hindu philosophical terms. The modern spirit may swallow up superstition, but Hinduism will in the end absorb it, as it has absorbed the sacred snakes and the smallpox goddesses of an earlier and less scientific age.

MODERN HINDUISM

It has been said that Hinduism is a social system rather than a religion and its unity is to be found in its social structure rather than in its religious beliefs. Hinduism, in the course of its development, has absorbed so many diverse elements from other religions that it is not one belief but a whole collection of beliefs. But its social system has imposed an extraordinary unity on Hindus. The main features of the Hindu social system are the caste system which divides society up into a number of hereditary classes and the joint family system. Under this latter system the family is the patriarchal group of parents, children and grandchildren living together under one roof, married sons bring their wives into the family, and property is held in common. The system does not allow of much individual freedom but on the other hand it gives security, for it cares for the sick, the old and the unemployed. It is these two institutions which give the individual a secure place in society, that have given Hinduism its peculiar cohesion, and have kept it alive through all the invasions, wars and conquests that have swept over the land. A man may believe almost anything he likes—he may even be an atheist—but as long as he conforms outwardly to the social demands of Hinduism he is considered a Hindu.

Hinduism has been stirred to new life by the impact of the West. From about the beginning of the 19th century Western culture began to influence the life of India. At this time Hinduism was at its weakest under the long Muslim rule the Hindus had sunk to a subordinate position, their learning was decaying, superstition was rampant, and the caste system was most rigid. The great humanitarian movements of nineteenth century Europe found an echo in India and the preaching and example of the Christian missionaries also played a large part in starting a reform movement in Hinduism. The pioneer of this movement was the great Raja Ram Mohan Roy, who, though he did not become a Christian, was the friend of Christian missionaries and adopted many of the ethical principles of Christian teaching.

He and his followers attacked the abuses of the caste system and worked for the emancipation of women. They tried to rid Hinduism of the superstitions that had grown round it, and to return to the pure teaching of the original sacred books.

In the latter part of the 19th century, the religious revival was paralleled by the growth of the national spirit. Ardent nationalists glorified everything Indian including of course the Hindu religion, so that there was a tendency for extremism in religion and politics to go together.

The nationalist movement in India, although a part of the great awakening going on throughout Asia, presents certain unique features : it is impossible to understand these without some understanding of Hinduism.

Let us take first of all the extraordinary hold that " Mahatma " Gandhi has on the Indian National Congress and on the illiterate peasantry. It can only be explained by reference to the Hindu conception of the " guru " or spiritual teacher. Now every religion recognises that a guide or spiritual teacher is necessary for those who seek spiritual enlightenment ; but in Hinduism the " guru " has attained an exceptional position because there is no single body of teaching but many schools of thought. The disciple is therefore completely subjugated to his " guru," whom he treats almost as a god, and to whom he gives entire obedience. Mr. Gandhi is far more of a religious than a political leader for the masses, and can only be understood as such—the very term " Mahatma " means " great soul " ; he lives an ascetic life, meditates, fasts, and in all his writings and speeches refers to religious principles and to the name of God. Consequently he is regarded by large numbers of Hindus as the spiritually enlightened teacher to whom unquestioning obedience must be given. Even liberal thinkers like Pandit Nehru, with his broad modernistic outlook, do not escape the spell. Can any man wield such power and retain his sense of proportion ? No wonder that he regards himself as the sole representative of the masses, or that his tone becomes dictatorial at times.

What of " non-violence," which the Mahatma claims as his contribution to the solution of world problems ? Is this conception traceable to Hindu ideas ? Yes and no. Hinduism recognises " ahimsa ", or non-violence, as an ideal of conduct, but the interpretation that Mr. Gandhi has given to it is peculiarly his own. Hinduism does not lay down pacifism for all. In the caste system there is in fact a caste of warriors whose caste duty it is to fight when need arises ; but the priestly caste, the Brahmins, on whom is enjoined a life of strict discipline, may not take life. The traditional teaching on this matter is clearly laid down in the most famous book of Hindu literature, the Bhagavad-gita (" The Lord's Song "), which forms part of the epic poem of the Mahabharata. The epic fight is about to begin ; the hero Arjuna flinches before the prospect of slaughter ; but the god Krishna appears to him in the guise of his charioteer and

tells him to do the duty laid on him by his caste without passion, fear or anger "If thou wilt not carry on this righteous warfare, then casting away thy own duty and thine honour, thou wilt incur sin" says the divine charioteer. Most Hindus accept the point of view that fighting may in some circumstances be righteous, and it is generally recognised among Hindus that in the present world crisis, when civilization has to be defended against Fascism, there is no sin in fighting. At any rate, Hindus have not been backward in joining the fighting forces.

To most Congressmen "non-violence" is a technique rather than a principle, a technique of embarrassing the Government by breaking the laws without resort to violence. Now the application of this technique assumes that the Government has a conscience which is sensitive to such treatment, and most Congressmen would admit that while this technique is often successful against the British who are not a ruthless people, it would fail entirely against Nazis or the Japanese, who make a cult of ruthlessness. To Mr Gandhi himself "non-violence" is an inviolable principle, but in this he stands almost alone. Twice during the war when Congress have offered full participation in the war (though on unacceptable terms) he has withdrawn from the leadership, for he cannot bear to be associated with violence. Perhaps that is why he refuses to face the obvious fact that the disturbances that occurred in India in August 1942 were the inevitable outcome of his policy of "non violent" sabotage, were he to face it, it would be an intolerable grief to him.

Hinduism, which glorifies the ascetic, has sometimes been described as a religion of escape from the world. This is not essentially true of Hinduism which lays down as the ideal right action, i.e., according to one's caste or position in the world. But because of its exaltation of spiritual values, its insistence that the material world is illusion, it easily leads many Hindus to a negative attitude to life's problems. This helps to explain why the suffering and loss involved in non violent non-co-operation make such an appeal to the Hindu. This same negative attitude to material things is, possibly, one reason for Mr Gandhi's hatred of industrialization and his preference for a simple village civilization, even though it involves a low standard of life.

A cause of difficulty with other religions is the Hindu attitude to religious truth, which is so different from that of the "people of the Book" the Muslims, Christians and Jews. There are many schools of thought in Hinduism and they are extremely tolerant of each other. To the Hindu all religions are true. The divine Charioteer sings in the "Bhagavadgita" "However men approach me even so do I welcome them, for the path men take from every side is Mine". This attitude, so admirable in itself, has led in modern times to a curious intolerance of people with missionary zeal. For, argue some Hindus, if all religions are true, there is no point in converting men from one religion to another, and men ought to stay in the religion in

which they were born. In the proselytising activities of other religions they scent an ulterior, possibly a political, motive. Some sects go even further and argue that all Indians ought to be Hindus, since this is the original religion of India, and one religion would make for national unity and strength. One sect has even developed missionary activities among non-Hindus. There has been a certain amount of misunderstanding and friction about this matter of conversion; and it helps to explain why Muslims in India want protection for their religion, either by a separate State or by cultural autonomy for predominantly Muslim areas.

But enthusiasts for proselytising activities among Hindus are very few; the vast majority do not wish to change a man's religion to Hinduism. They have not only tolerance but respect for the religion of others, and reverence the founders of Christianity and Islam as great world teachers.

THE MUSLIMS IN INDIA

Hinduism is the oldest surviving civilization in India, and all other religions and cultures have been superimposed on it and have mingled with it to a greater or lesser extent. The second great religious culture to arrive in India and to survive into modern times is that of Islam. Although other religions have contributed to the complex of cultures that make India, it is these two, Hinduism and Islam, that govern the lives of the vast bulk of the people of India, and it is out of their elements that the civilization which we characterise as Indian has been built. Geographically the Hindus and Muslims are mixed. There are, it is true, some parts of India which are mainly Muslim and some which are mainly Hindu, but no part is exclusively populated by people of one religion, and everywhere they impinge on each other's lives.

To understand the present distribution of Muslims in India and the nature of their relations with the Hindus, we have to know something of their history.

The first Muslims to come to India were Arabs, who came from the 10th century onwards to trade. Some of these Arab traders established communities along the west coast and intermarried with the local inhabitants; their descendants still form separate communities along the west coast (which is mainly a Hindu region) known as Moplahs.

The Muslim invaders who were to have the profoundest influence on the history of India came from the North-West, over the passes of the North-West Frontier. They were nearly all Turks, who established themselves in Persia and Afghanistan and from there overran the rich and level plains of Northern India. Turkish invasions from

Afghanistan occurred from the 11th to the 16th century when the last and perhaps the most important invasion that of the Moghuls took place By the 12th century they had established their capital in Delhi, and from time to time Empires were established stretching over the whole of North India Conquest of the vast and almost level Indo-Gangetic plain was comparatively easy the mountains separating this plain from the Deccan plateau held the invaders up, though from time to time they succeeded in crossing them and overrunning parts of the South But they never overcame the far South or made of India a single Muslim kingdom V 26 N 5

It must not be imagined that the Muslim Empire was a continuous institution lasting for several centuries It frequently broke up Governors broke away from the control of Delhi and set up separate kingdoms This occurred particularly in the Deccan plateau where four or five smaller Muslim kingdoms came into existence New dynasties arose that for a time united the northern parts into one only to break up again through the rebellions of local Governors and chiefs Strongest of all the Muslim dynasties was that of the Moghuls, who came like so many of their predecessors from Central Asia via Afghanistan The founder of this line Babar established a powerful Empire over the whole of Northern India, and his successors attempted the conquest of the South though they never succeeded in obtaining any permanent hold there In fact one of the reasons for the break up of the Moghul Empire was the attempt of the Emperor Aurangzeb in the latter half of the seventeenth century to extend his conquests southwards an attempt which exhausted the resources of his Empire and left it a prey to rebellious Governors and foreign invaders 24523

During these long centuries of Muslim domination the relations between Hindus and Muslims were not unfriendly Had they been otherwise the invaders' dynasties could hardly have survived for they were few in number compared with the mass of Hindus The invading race were not generally oppressive They left the masses alone and their relation to them was chiefly to gather taxes from them The country was administered by Muslim governors and partly by those Hindu chiefs whom the invaders found in possession and who were left in peace on their lands as long as they paid the tribute demanded by their conquerors Policy towards these Hindu chiefs was not consistent sometimes every effort was made to conciliate them and to secure their co-operation in administering the Empire sometimes they were regarded with suspicion and their power and privileges restricted It was in such times of repression that the more energetic of the chiefs moved to Rajputana and set up separate kingdoms there, some of which have survived to the present day

As has already been remarked except in the trans Indus territories the invading Muslims were few in number, and the bulk of the Muslims in India today are the descendants of Hindu converts The invaders on the whole left the Hindus fairly free in their religious life Conversions occurred in great numbers, however, in the North-West

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of India, where contact with the Islamic countries was most continuous and the Islamic religion most vigorous. Another area in which Islam received many adherents is—rather unexpectedly from its geographical position—East Bengal. The facts are obscure but there seem to be historical reasons for this. During the twelfth century Bengal was conquered by a Hindu dynasty from the South which enforced a strict adherence to Hindu caste rules, which were oppressive to the lower classes; at the end of the same century, before these rules had become customary, the Turkish conquerors came, driving out the Hindu rulers and preaching their religion of equality. It is probable that a mass movement towards the new religion was started by this chain of circumstances. Whatever the cause, from those times to the present day the masses in East Bengal have been predominantly Muslim. In other parts of India conversions were comparatively few, and the Muslims are to be found chiefly in the towns. This is easily explainable when we remember that many parts of India had Muslim governors who had their seat of government in the towns; they would bring with them a certain Muslim entourage, and their presence would lead to a number of conversions.

This brief historical review explains the present distribution of Muslims in India. They form 95% of the population in the North-West Frontier Province, and about three-quarters in Kashmir, Sind and the Western Punjab, and also in Eastern Bengal. In other parts they are in a minority, usually from 10-15%. A word must be added about Hyderabad, which is frequently spoken of as a Muslim State. It is a survival of an old Southern Province of the Moghul Empire, the Viceroy of which had made himself to all intents and purposes an independent ruler; the ruling family and the upper classes are Muslim but the bulk of the population, as elsewhere in South India, are Hindus.

Hinduism and Islam are not only geographically but culturally intermingled. It is true that the two religions are in many ways so different that complete fusion is impossible. Islam is monotheistic; Hinduism admits the worship of many gods and goddesses. Islam preaches a universal brotherhood of all believers, while Hinduism is based on caste, or hereditary differences between classes. But they have borrowed from each other. The Indian Muslims have retained many Hindu characteristics. Conversion was seldom of individuals (though some individuals became Muslim out of conviction); it was more frequently of families and groups of families, who brought with them their social customs relating to marriage and inheritance. In Muslim rural communities in particular, the old Hindu customary law of inheritance *i.e.* equal inheritance by all male heirs, is generally followed. Divisions analogous to those of Hindu caste have in this way crept into Indian Muslim communities. On the other hand, the influence of Islam has affected the Hindu caste system, which is noticeably weaker in the North than it is in the predominantly Hindu South. Religion itself has been affected. There are many elements in Indian Islam which are borrowed from Hinduism—for instance

mysticism, and the reverence for saints which at times comes close to deification. The influence of Islam has strengthened the monotheistic trend which always exists in Hinduism in spite of its many gods and goddesses, and found expression in the foundation of the Sikh religion, established by Hindu teachers preaching the one God. Some of the great religious teachers, such as Kabir, the fifteenth century mystic poet, are acclaimed by both religions.

The influence of the Muslim conquerors on the culture of India has been both widespread and profound. Persian was the official language for seven centuries. Persian words have found a permanent place in most Indian languages, Persian literature has long been the study of the cultured classes, who also for long expressed themselves in Persian. Art and music have been influenced by Persian models. The Turks brought with them a taste for building; they brought with them also the characteristic forms of the dome and the arch, which, allied with the solid and powerful Hindu style of architecture, gave rise to a distinctive Indo-Islamic style.

In every aspect of life the two religions, in many ways distinct and in some even antagonistic, have interacted on each other to form that something unique and distinctive, which we call Indian civilization. North and South products as they are of different historical influences, are profoundly different in many ways, yet they have a unity in their diversity which the observer cannot but recognize.

CHRISTIANITY IN INDIA

Christianity is the third largest religious group in India. It has about 6 million adherents. Compared with the two major groups, Hinduism with its 290,000,000 adherents and Islam with 90,000,000, it is small. But its importance cannot be measured by mere numbers. It has been part of the impact of the West on India, and it has had an influence far beyond the bounds of the Christian community.

Before discussing this somewhat intangible subject, let us look at the facts about the Christians themselves, their history and their present position. There are two main groups of Christians in India: the Syrian Christians, who trace their descent from converts of the first few centuries of the Christian era, and the Christians who owe their conversion to much later missionary efforts coming from Western countries.

Christianity came to India centuries before Islam. Syrian Christians claim that one of the original twelve Apostles, St. Thomas, came to the West Coast in the first century A.D., and converted a number of Brahmin families who founded their church. Whether this tradition is true or not, there is at present a flourishing Christian community on the West Coast which dates from very

early in the Christian era. In some parts of the Indian States of Travancore and Cochin 90% of the people are Christians, and the church is as familiar a feature of the landscape as are the temple or the mosque in other parts. The Syrians however retained much of their caste outlook and remained an exclusive community. They did not try to convert their Hindu neighbours.

The further spread of Christianity was due to European and American missionaries. The first Western missionaries were Catholics who came to India from the 16th Century onwards. The Portuguese conquest of Goa in 1510 gave a great impetus to missionary activity, for they were ardent Christians burning with a zeal for conversions. The Jesuits were the chief agents of conversion, and they established Christian communities in Goa and elsewhere in South India which have survived to the present day.

The first Protestant missions were established in the 18th century, when Danish and Swedish missionaries began to work in South India. At first the East India Company forbade mission activity in the territories under its control, for it wished to emphasise respect for the religions of the local inhabitants. In 1813 this ban was withdrawn, and a large number of foreign missionary societies began to work in India. The nineteenth century was the great century of mission activity. As well as the steadily growing Catholic missions, British, American, German, Swedish and Danish missions of various Protestant denominations established themselves.

Foreign control was—and is—a feature of Christianity in India. It is less evident in the Catholic Church, in which about half the priests are Indian. It is very marked in the Protestant bodies, which have about five thousand foreign missionaries who occupy most of the important positions in the Church organisations. The old Syrian Christian community is entirely Indian, however, the only foreigners connected with it being a handful of English educationists. None the less, the presence of so many foreigners in important positions give some non-Christians the impression that Christianity is a foreign importation from the West.

Most of the converts in the recently-founded Churches have a low social and economic status. A small number of the converts have been drawn from the highest castes; but most of them are drawn from the very poorest, the "untouchables" of Hinduism, who find in Christianity a means of escape from the social degradation of their low position in the Hindu social scale. The bulk of the Christians are desperately poor, and the bulk are also villagers.

Missions and other Christian bodies in India carry on a large amount of social service. They have endeavoured to uplift these very poor people among whom they chiefly work by giving them education, and improving their economic position. They run schools, orphanages, workshops, technical training schools. They have hundreds of mission hospitals and dispensaries, and a large number of sanatoria

and leper colonies Since most of their flocks are villagers they pay special attention to rural problems, and promote improved agriculture, cottage industries, co-operative societies, public health work

Christianity in India consists of a number of well-organized groups Each mission, of which there are now 163 has its own organization and funds Mission work has become largely institutionalised, it is carried on through institutions controlled by the missions, such as schools colleges, orphanages and hospitals Many missionaries are engaged in the administrative work entailed by all those institutions rather than in direct conversion work

Of recent years there has been a powerful tendency towards closer unity between these groups This tendency is seen both among the missions themselves and among the Indian Christians whom the missions have called into being The missions frequently combine to run institutions such as University Colleges, teachers' training colleges and publishing houses Conferences and summer schools are often joint efforts Indian Christians are developing a group consciousness and feel that they have common aspirations and interests Nowhere else in the world has the movement for fusing different denominations of Christians gone so far as in India, a South India United Church is coming into being composed of four different groups, and a similar movement has started in North India

The Indian Christian community has been affected by the Indian national movement The tendency towards unity is one aspect of this influence They are no longer content that their religious affairs should be under the control of foreign missionaries, but wish them to be controlled by Indians and they see little meaning in the divisions that have been fortuitously created by the existence of a number of foreign missions The tendency to Indianization has been welcomed by foreign Christian workers and wherever possible responsibility is given to Indian workers The Anglican Church was disestablished in 1927 and became the Church of India, Burma and Ceylon, eventually its control will pass into Indian hands

At the same time there is an effort to give an Indian expression to Christian life and thought There was a tendency in the last century for Indian Christians to imitate the West in their dress and manner of living, their art and music, but this phase is passing and Indian Christians dress and live like other Indians and are taking an interest in Indian culture Indian music is now sometimes used for Christian devotional singing, there are Madonnas painted in modern Indian style There are Christian *Ashrams* (retreats) in which the inmates wear the yellow robes of the Hindu devotee, and Christian churches built in the style of Hindu temples in which the symbol of the Cross replaces the symbol of the lotus, and the Christian altar the Hindu shrine These are signs of the determination of thinking Indian Christians to give Christianity an Indian expression and to vindicate their claim to be as truly Indian as their Hindu and Muslim brethren

Christians have also taken their place in the wider life of the community. Christians have won leadership in various spheres of life. Sir Joseph Bore was a member of the Viceroy's Executive Council; a Christian of princely blood, Sir Maharaj Singh, has been President of the Indian Liberal Federation; some of Mr. Gandhi's most trusted lieutenants, those in charge of the rural uplift and educational programmes, are Christians.

Some non-Christians regard Christianity with suspicion as the religion of their foreign rulers, and they accuse those who become Christians of losing their nationality and becoming upholders of foreign domination. Some Hindu nationalists are even opposed to all converting activities. Mr. Gandhi has gone so far as to say that if the missionaries confine themselves to humanitarian services he would welcome them in a free India, but if they persist in making converts he would want them to withdraw. There is inevitably a big difference between the Hindu and Christian attitude to conversion. Christianity is based on certain definite teachings about a historical personality; while Hinduism has no one body of teachings, is un-historical in its approach, and lays more stress on conformity to social customs than on theology. Hindus therefore cannot understand why anyone should want to change his religion, and argue that those who want to follow Christ's teaching can do so while remaining within the Hindu system.

There is also a political reason for the Hindus' attitude to conversion. Constitutionally, Christians are regarded as a separate minority, with special representation in the Legislatures; in the Provinces they vote in separate constituencies for their own members, while in the Central Legislature the Government has nominated a Christian member. Since voting for the legislatures goes by religious groups, a conversion from Hinduism to Christianity is a vote lost to the Hindus.

India has been open to Western influences for the past century and a half, and among them Christianity has been by no means the least important. The West has brought other influences: humanism, the liberal rationalism of the French Revolution, the scientific spirit and of recent years Communism. Among these influences it is extremely difficult to assess the part that Christianity has played; but it has undoubtedly been a challenge to India's other religions and a stimulus to reform and reawakening.

There has been no official attempt to propagate Christian teaching. The Government has from the first proclaimed its religious neutrality and its desire to respect the religious convictions and practices of its Indian subjects. Many of the officials however were deeply religious men, and were inspired by their religion to devoted service to the country of their adoption, and to measures for the uplift of the poor and the relief of suffering. Such men also exercised a Christian influence, though we think of it chiefly as coming from the missionaries, since they were free, as the officials were not, to proclaim the Christian basis of their actions.

Christian influence has spread in a number of ways. It has spread largely through Christian educational work in schools and colleges, the bulk of the students in these institutions are non-Christians. Christian bodies like the Y M C A and the Y W C A take a special interest in students, Christian and non-Christian alike. Christian literature is widely read, particularly the Bible, and in the Bible particularly the New Testament. The example of many missionaries who lead devoted lives in the service of the poor is another profound influence. Personal contacts count for much, nearly every missionary has a large circle of non-Christian friends.

The result of contacts between Christian and non-Christian has been that the ethical teachings of Christ have penetrated deep into the non-Christian mind. Throughout India there is reverence for the personality of Christ, and for the teachings of the Sermon on the Mount, at the same time there has been admiration for the social service of Christian bodies.

Christian influence has helped to stimulate the reform movements of the last hundred years which attack caste untouchability and the subjection of women. Many of the great reformers such as Raja Ram Mohan Roy, openly acknowledge their debt to Christian teaching though of recent years, with the growth of intense nationalistic feeling, the debt has been less openly acknowledged. Mr Gandhi himself has been profoundly influenced by his reading of the New Testament, and claims to drive his idea of non-violent resistance from it.

Christians sometimes express concern about the future of Christianity in India. Some are afraid that they would not have religious freedom in a "free" India and they therefore look to the British connection to protect their religious interests. Others think that when India has obtained complete self-government and the British in the country are regarded as guests rather than as rulers, Christianity would no longer be associated with foreign rule and would be in a much better position. Some Hindus would like to see Christianity absorbed into Hinduism as Buddhism was or at most survive as a Hindu sect. But neither Christianity nor Islam, both of them religions based on historic persons, are amenable to the absorptive process that destroyed Buddhism in India as a separate religion. Christianity has flourished on the West Coast for nearly two thousand years without any foreign assistance, and it is too deep-rooted now to be extinguished. There is little doubt that the more recently-founded Christian Churches are acquiring the same capacity for survival.

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THE WOMEN OF INDIA

The traditional position of women in India is one of complete subordination to men. It is true that in the earliest records women had an honoured though subordinate place in society ; but they were honoured not for themselves, but as the actual or potential mothers of sons, and their whole aim in life was to produce sons. Monogamy was the general rule, though polygamy was not considered immoral ; in particular if the first wife failed to produce a son she was likely to be superseded by another wife.

But for the wife there was no such laxity. She was supposed to be entirely faithful to her husband—so much so that if the husband died, life was considered finished for the widow, and she was encouraged to mount the funeral pyre with her husband and to be burnt with him. If she did not do this she was condemned to perpetual widowhood. It was thought that her husband's death was a punishment for her sins in a former life, which she had to expiate by a life-time of penance. The practice of widow-burning or "Suttee" became widespread in course of time, and often women were dragged into the flames against their will. This horrible practice was stopped by the British in 1829, and only rarely is the law evaded now.

Child marriage is still widespread ; it does not seem to have been an ancient custom but developed as the position of women deteriorated. Girls seldom had any voice in choosing their husbands and usually saw them for the first time on the day of their wedding.

Muslim women have in theory a better position than Hindu women, since they have considerable rights of property and the right of divorce ; but their seclusion results in their being seldom able to exercise these rights. The custom of *purdah*, though not unknown among Hindu families of high birth even before the Islamic period, spread with the coming of Islam.

The present position of women still leaves very much to be desired, with the exception of those Indian women, still comparatively few, who have defied the old traditions and won freedom and a place in the world for themselves. For the bulk of Indian society, rich and poor, Hindu and Muslim, there are two worlds, the world of men and the world of women. The world of women is that of the back regions of the house, where they live secluded among themselves. Indian households are usually large ; a number of brothers with their wives and children live together in a joint family system, so the women have plenty of company. It is a world of the kitchen, of looking after children, of gossip and intrigue. *Purdah* is still widespread among the upper classes, though less so among the Hindus than among the Muslims, and less in the South of India where the Muslim influence has always been far less than in the North. The women of

the poorer classes do not keep *purdah*, since they have to work in the fields, but their lot is terribly hard and they are frequently employed in menial tasks

Yet the Indian woman is by no means abject. Even behind the *purdah* they exercise a truly womanly influence. Many of the arranged marriages are at least as happy as the love matches of the West and of emancipated young India. Moreover Indian women are notably good housewives. Where the household is large, the chief woman of the house (usually the grandmother of the wife of the eldest brother) has considerable responsibility and handles large sums of money. Even the most secluded woman knows to a fraction of a coin what the prices ought to be in the market. The chief of the household is an autocrat in her own sphere and has a position of considerable dignity, her word is law and the younger women of the house have to obey. The Indian women behind the *purdah* are not on the whole unhappy, but where they are they have no redress, no means of escape. And what influence *purdah* women exercise is often misused since they cannot but be ignorant and prejudiced.

But in this secluded life in the discipline of the big household, the Indian woman has developed unselfishness, quiet endurance and graciousness. Ladies of the richer households are often highly accomplished, some are even learned. And when they step out from behind the *purdah* they do not lose these qualities, but bring them out into the big world in which their leaders are already playing such a notable part.

For the Indian scene is changing rapidly. India in common with other Asiatic countries is witnessing the emancipation of its women. Although as yet the movement has affected only a fraction and those of the upper and middle classes, it is gathering strength and is likely before long to spread through the whole nation.

The women's movement is part of the great national awakening of India, girls' education is spreading, thousands of women have given up *purdah*, women are entering every profession. Millions of women have the right to vote, they are going into politics. At the last Provincial elections eighty women obtained seats in the legislatures, and one of them became a Cabinet minister.

The first stimulus to women's freedom came from outside from the Christian missionaries who founded the first schools for girls at the beginning of the 19th century. But Indians did not lag far behind. It was at this time that the modern reform movement in Hinduism of which Raja Ram Mohan Roy was the pioneer, began, and prominent among its aims was the greater freedom and dignity of women.

The women's movement in India has always expressed itself in organized associations and clubs. Every fair sized Indian town now has its club for ladies. It is remarkable that these clubs do not

content themselves with recreation for their members but organize adult classes, child welfare centres and other forms of social work for their more unfortunate sisters. There is also a powerful patriotic element in these organizations. The Women's Indian Association, which was formed in 1912, had as its aim "to present to women their responsibilities as daughters of India, as wives and mothers who have the task of training, guiding and forming the characters of the future rulers in India."

In the last fifteen years the All-India Women's Conference has become the premier women's organization. It was founded in 1926 to promote interest in educational and social questions affecting women. It has done more than any other women's organization to waken Indian women to their new opportunities and responsibilities. As soon as it was formed it began an agitation for the improvement of education, and organized a nation-wide campaign against child marriage. When the Child Marriage Restraint Act (which forbade marriage of girls below the age of fourteen) was passed in 1930, mainly due to the women's campaign, the Conference organized local Vigilance Committees to prevent breaches of the law in their districts.

One interesting development of the work of the Conference is the Lady Irwin Home Science College in New Delhi, founded with the money raised by the Conference. It teaches girls how to manage their homes on modern scientific lines, and also train teachers of domestic science, so that its beneficent influence spreads throughout the country.

In India as in other countries, much of the organized struggle for women's freedom has centred round the vote. In 1917 when Indian constitutional reforms were under consideration, Indian women demanded equal rights with men. The British Parliament, which was itself hesitating to give votes to Englishwomen, shirked the whole question and left it to the Indian Legislatures to decide! With two exceptions, these promptly bestowed voting rights on women, and a number of women entered the legislatures. In recent years women have taken a big part in political agitation; in the disturbances of 1930-33 thousands of them courted imprisonment. When the Government of India Act was passed in 1935, women had gained a great deal. Some 6 million had been enfranchised, and there were special seats for women in the legislatures. They are of course not satisfied, and will not rest content until they are on a completely equal footing with men.

Meanwhile women legislators and the organizations behind them have done excellent work. They have tackled questions like women's property rights, abolition of polygamy, divorce and prohibition of women's work in mines. Hundreds of other women have found places on Municipal Councils and District Boards, where they are bringing a fresh point of view to questions affecting women and children.

With all its patriotism there is nothing narrowly nationalist about the Indian women's movement, and they give an unhesitating welcome to all who work with them. British and American women in particular have helped the pioneers of the movement. The women of India are developing the international spirit, and their organizations already have international affiliations.

MODERN EDUCATION IN INDIA

Before the British came, India had a system of education including both village teaching and higher learning. The village schools seem to have been rudimentary, teaching mere literacy and account keeping, and they do not seem to have covered more than a part of the villages. There were also schools teaching the ancient religious lore in the classical languages of Sanskrit, Persian and Arabic. But due to the disturbances of the 18th century, learning was at its lowest ebb when the British began to rule India, and in building up an educational system they had to begin almost at the beginning.

The great stumbling block in Indian education has always been the great variety of languages, there are more than a dozen major languages and more than a hundred minor ones. This does not so much affect primary education, where the obvious policy of teaching in the vernacular has always been followed, but it creates a serious problem in higher education.

The British interested themselves in education from the first, and at once the question of language arose. The Government began by encouraging the existing schools of classical studies by financial grants, but a demand for English education arose from the Indians themselves. This was partly due to the fact that English was a necessary passport to Government service, and partly due to the desire of progressive Indians to get in touch with western thought and to shake off the dominance of their ancient religious customs. The first English College was founded in Calcutta in 1816 by an English rationalist (a watchmaker) and a Hindu social reformer—a strange combination! It was greatly to the advantage of Government to have a good supply of English speaking Indians for their service, and in 1835 the question was settled by Government deciding to support schools and colleges giving western education through the medium of English.

There is no doubt that the use of English in secondary schools and colleges has been a handicap to all but the better type of student. On the other hand, it was the only possible common language for India, and it has opened up English literature and western thought to Indians. It has been a powerful modernising and uniting force.

In 1853 Government decided on a progressive educational policy. Departments of Public Instruction were set up in all the Provinces.

Government itself managed a few schools and colleges, but the general policy was to encourage local bodies and private organizations to set up their own and to aid them by Government grants. This policy was adopted largely to give freedom to different religious bodies to have their own educational institutions. All aided institutions were subject to Government inspection. Government also undertook the responsibility of providing trained teachers. It was decided to establish Universities in the three main towns at Calcutta, Bombay and Madras. Educational policy has more or less followed on the lines laid down in 1853. Financial responsibility and control are shared between the Provincial Governments, local bodies and private organizations.

It is freely admitted by all who touch Indian education that the results are far from satisfactory. The grant-in-aid system has resulted in Government money going to those who could shout the loudest, not those who need it most. An important section of the Indian public demanded English education since this was essential for Government appointments, or for the more uncertain but valuable prizes of the law. The result has been that the system is top-heavy; too large a proportion of the funds available has been spent on University and secondary education and too little on the education of the rural masses. India is thus faced with the problem of educated unemployment on the one hand and mass illiteracy on the other.

Primary education is still very inadequate. Even now only 14.6% of the population is literate. There is an insufficient number of schools, about 190,000, which cannot serve all of her 700,000 villages and her many towns. The training of teachers still leaves much to be desired and they are not paid well enough. The chief weakness is what is called wastage: it is reckoned that at least four years of schooling is necessary to establish permanent literacy, but owing to the heavy demand for agricultural labour, many children are taken away from school before they have completed the course. It is estimated that only 35% of the boys and 22% of the girls entering schools attain to the fourth class.

Education is neither free nor compulsory. The principle of compulsion has been accepted in a number of Provinces, but it is left to the option of any local body which votes for it. It has been tried in a number of places, but even under compulsion only about 66% of the children can be got to school. It is difficult to persuade parents who are themselves illiterate to send their children to school or to keep them there.

There has of recent years been a great enthusiasm for educational reform, which has directed itself mainly to village needs. Some very successful village boarding schools on the "project method" *i.e.*, with a curriculum based on planned activities, have been tried; the children live in cottages of an improved village type and learn through lessons based largely on their domestic activities. Indian Nationalists have taken up the matter keenly. When Education was put in charge

of Provincial Ministers under the reforms of 1919, educational reform received considerable stimulus. In 1937 Mr Gandhi proposed the famous "Wardha Scheme", by this primary village education was to centre round some basic craft such as hand spinning, and all lessons were to be taught in relation to it. He argued that this would have a twofold advantage, first, it would relate the child's learning to its environment, second, by producing while it learnt the child would be paying for its education. The second contention has proved quite unsound, experiments show that children's work can cover only a quarter to a third of their school fees. The first principle is simply the project method in a new form. With all its weaknesses Mr Gandhi's scheme achieved his main purpose of focussing attention on the reform of village education. Under its stimulus, the Provincial Congress Governments did good work in 1937-1939 in extending village schools and reforming syllabuses, and this work has been continued by the Governments that succeeded them.

The same period witnessed a growing enthusiasm for adult education. A great adult literacy campaign was launched in town and village, college and high school students flung themselves into the work. Good work has been done, especially in the industrial areas, but much more remains to be done.

To turn now to higher education. There are 18 Universities in India with some 176,000 students on the rolls. We have already touched on the main weakness, from which all others arise, that English education is regarded chiefly as a means to Government service. Too much emphasis is therefore given to the mere passing of examinations, education is too literary and until recently scientific studies were neglected. The standard of teaching is admittedly low, there is too much learning by heart and too little encouragement of real thought. The bulk of the students who take the pass degree leave the University incompletely educated and many of them are unemployable except in subordinate positions such as clerks and shop assistants. Yet some of the Honours and post graduate work is excellent, the best students can take their place anywhere in the English speaking world. The system is being slowly reformed. More students are taking up science. Higher qualifications are being demanded of teachers and a proper place is being given to research.

There are also a number of professional colleges, engineering colleges, teachers' training colleges, law colleges, medical colleges (including two for women), agricultural colleges and forestry institutes. These to some extent meet India's crying need for trained professional workers.

Secondary education suffers from much the same defects as University education. The secondary school is regarded chiefly as a means of getting to the University, consequently too much attention is paid to examinations. Education is too literary, and vocational training is neglected. Yet India is desperately in need of skilled technicians. War conditions are beginning to remedy this defect as

technicians are being specially trained for the armed forces and armaments factories. There are good prospects of these technical training schemes continuing after the war. Another interesting reform is the vernacularization of secondary education in some of the Provinces and States, though English is kept as an important compulsory subject. It is too early to say how this will work, but it is claimed that the children do their studies far more intelligently and that their English does not suffer.

The most hopeful aspect of the Indian educational system is that the general criticism to which it is now subjected has led to enthusiasm for reform. Keen interest is taken in educational experiment. The Government of India has before it a far-reaching scheme of post-war educational reform prepared by its Educational Adviser, Mr. John Sargent, which proposes universal, free and compulsory primary education, the provision of generous scholarships to high schools and universities, the extension of technical education and a great increase in the number of teachers. This scheme has roused considerable discussion; and even if it is not adopted in full, it is likely to prove the starting point of far-reaching reforms.

INDIA'S CULTURAL HERITAGE

India's cultural heritage is indeed wonderful; in antiquity, richness and variety it can compare with that of any country in the world. If we include the civilization of Mohenjo-Daro, the buried city recently discovered, we may say that India has a cultural history of five to six thousand years. Indian culture is part of that great Asian culture which through thousands of years has developed on its own distinctive lines, giving much to the West and receiving much from it, but preserving always its unique character. Within the main framework of Asian culture, Indian culture is itself unique; again, it has received much from other countries and given much. But what it has received it has transmuted into something essentially its own.

Whether India may be described as one of the original sources of human civilization may be disputed; for the very basis of all its culture, the religion of the Vedas, it received from outside in times of remote antiquity, when the Aryans migrated here. But it was on the soil of India that the Vedic religion was developed into Hinduism; it was here that the great philosophical works of the Hindu teachers were composed; it was here that the Buddha taught, and from here sent out missionaries to win one-fifth of the human race to Buddhism. It was here, moreover, that religious ideas of Hinduism and Buddhism found expression in stone and bronze in some of the artistic wonders of the world that have inspired artistic traditions wherever these religions spread. The world, and Asia in particular, owe a great cultural debt to India.

The basis of all Indian culture is religious. The ancient Vedic religion, which was originally a form of nature worship, in which the gods were the personified forces of nature developed in two directions. For the inner circle of the Brahmin priesthood, it became a highly philosophical religion, and gave birth to the great religious literature of the Vedas and the Upanishads. In its popular form it remained polytheistic, and indeed added many gods and goddesses to the Hindu Pantheon in course of time. This too, gave birth to a great literature that of the Hindu epics, with their crowded canvasses of gods and heroes, which have been the basis of the folklore of the Indian countryside for thousands of years. The two aspects of Hinduism were by no means sharply separated, since for the initiated the gods were symbols, and the legends about them acquired a mystical meaning. The polytheism of Hinduism, with its wealth of legends, has stamped a particular character on Hindu art—a profusion of forms, as though the artist were trying to express the myriad nature of the divine forces that control the cosmos.

The earliest monuments which still survive are Buddhist and not Hindu. That does not imply that Hinduism had no art, but only that its art was expressed in perishable materials. The earliest Buddhist monuments are too mature not to be the outcome of a long artistic tradition. Buddhism itself gave an impetus to building. It had two requirements, the shrine and the monastery, and since these were meant to last for generations they were built in stone instead of the wood or brick of the earlier Hindu buildings. Since there was never any clear break in India between Hinduism and Buddhism, many Hindu symbols were utilised in Buddhist buildings—for instance, the Buddha is always represented as seated on the lotus, the Hindu symbol of eternity. In the ancient sculptures at Sanchi, dating from the 1st century A.D., there is a panel of Buddha's mother, attended by two elephants pouring water on her head, this is nothing but an adaptation of the Hindu legend of the dawn goddess, who arises each morning attended by elephants (symbols of rain clouds). Hinduism gradually absorbed Buddhism, till the latter disappeared from India as a separate religion, and the Buddha was transformed into one of the gods of the Hindu pantheon, and his sculptured image took its place with those of the other gods.

Not only was the subject matter of Indian arts religious, but the inner spirit was religious also. The craftsmen were organized into guilds which were at bottom religious guilds. The rules of their craft were laid down in the "Silpa Sastras", religious books dealing with every form of art connected with temple worship. Immemorial tradition prescribes the ritual by which the craftsman must prepare himself for the undertaking of a work of art. The work must be preceded by purificatory rites and sacrifices, by meditations and praises, and only when the craftsman has meditated long on the inner nature of the object to be portrayed can the hand properly perform its function.

The earliest paintings that survive are the world famous frescoes of the Ajanta caves, which were painted at different times between the 2nd and 12th centuries A.D. These caves are of Buddhist origin, the homes of Buddhist monks, but many of the subjects are distinctly Hindu. The Ajanta paintings are already a mature art ; and indeed there are many references in classical writings to the " halls of painting " in royal houses, none of which now survives, which show that painting had developed long before. Anyone looking at the Ajanta paintings must be struck with their kinship with all Asiatic painting. The differentiation from Western painting is—technically at least—easily explained ; the characteristic of Asian painting is the emphasis on line, the absence of shadows and of rounded forms, while that of Western art is the portrayal of light and shade, of tones of colour. (There is a parallel in the sphere of music ; Western music has developed harmony, which gives light and shade to sound, while Asian music has developed melody, the pure line of music). Why Asian art has developed these characteristics is an interesting topic for speculation, but to pursue it would take us too far. Its unity can be at least partly explained by the spreading of Buddhism in the early centuries of the present era. Indian missionaries spread all over the East, and foreign Buddhists came as pilgrims and students to India. And not only the Buddhist doctrines but the Indian principles of art spread beyond her borders, and influenced the art of her neighbours.

The basis of Indian culture then is Hindu. But Islam brought to India a powerful æsthetic stimulus and caused a renewed flowering of Indian craftsmanship. The Muslims, in India as elsewhere, were great builders, and they brought new demands. Besides their secular need for forts and palaces, they needed mosques and tombs. They brought with them also new techniques, an expert knowledge of cement and mortar, which enabled them to develop the dome and the true arch, the characteristic forms of Muslim architecture. They employed the Indian craftsmen as their builders ; these used their traditional technique but adapted it to Islamic requirements. The strict rules of the Ulemas replaced the strict rules of the Silpa Sastras ; the sculptured figures of god and hero, of elephant and deer, disappeared, and in their place came the coloured tiles of Persia, and the exquisite calligraphy of the ninety-nine names of God. But something essentially Indian remained. The Indian craftsman, building his towering temples, had learnt the secret of combining strength with beauty of form ; but loading them with images of the gods, he had often blurred the beauty of outline. Now when Islamic simplicity stripped off the exuberance of sculpture, purity of form came back into its own. So grew that distinctive style we know as the Indo-Islamic, which reached its most perfect expression in one of the wonders of the world, the Taj Mahal.

A nation's cultural history can perhaps best be appreciated by outsiders through its architecture, for buildings speak a language which all can understand ; and since they are used by the mass of the

people, are the expression of a nation's soul even more than are paintings, literature and music, which may be the possession of the wealthy and educated few. But in India there was a development of popular literature and music during the 15th and 16th centuries which is worthy of note because it was the outcome of the impact of Islam on Hinduism. In spite of outward appearances, Hinduism has always had an underlying trend towards monotheism. The learned Brahmin recognises the unity of all things under the illusion of diversity, the illiterate villager directs his ultimate prayer to the One who is Greater than all. Islam strengthened this tendency. The fifteenth century witnessed the growth of devotional cults directed to the worship of a single and personal God. These were accompanied by an extraordinary outburst of devotional poetry—poetry that has survived in the living traditions of the people. Of one of these poets, Kabir, we do not even know if he is a Hindu or a Muslim. Another, Guru Nanak, was the founder of the Sikh sect, which tried to combine the teachings of Hinduism and Islam. The greatest of them all, Tulsī Das, who lived in the 16th century, retold the legend of Rama and Sita in the light of the new teachings. These poets furnished the popular religion the music and poetry, which have formed the common heritage of Hindu, Muslim and Sikh to this day.

Hindu and Muslim culture in India have never become fused into one, but they have joined together sufficiently to form a civilization distinctively Indian. The country has, indeed, a great and ancient cultural inheritance. Happily, under the stimulus of modern impulses, her cultural traditions are being revived in the modern age to contribute fresh beauty to the world's store.

THE CULTURAL RENAISSANCE IN INDIA

India has a long cultural tradition, to which her main religions, Hinduism and Islam have made the chief contributions. Hindu temples, sculptures, wall painting. Muslim mosques, forts and palaces are monuments to a glorious past. India also has a heritage of painting, stretching from the frescoes of the Ajanta Caves of the early years of this era, to the courtly schools of the 16th and 17th century. She has a long literary past, of poetry, drama, philosophy, unsurpassed by any other country in the world.

The cultural tradition of India has not been unbroken. In the past art, literature, music, building were dependent largely on courtly patronage. The country has suffered from periodic disturbances when kingdoms and empires fell and cultural activities declined. Hindu culture declined when the Muslims became the dominant power, and in turn Muslim culture declined when the British extended their rule. But enough was always preserved on which to build

a revival of culture. Under the changing political fortunes of kingdoms and empires the spontaneous culture of the village persisted ; they had their folk music and folk dancing, their village dramas, their religious ceremonies ; and this humble yet fertile soil nourished the roots of cultural revivals.

One of the big breaks in Indian history came in the 18th century, when the Moghul Empire broke down and the British established their power on the ruins. It was a disturbed period, and it was only towards the end of the century that the British brought effective peace in Bengal and elsewhere along the coastal regions, and it took another half century before the British peace was established all over the country. During this time culture was at its nadir ; there was no great literature, art or architecture.

The stimulus of contact with the West has brought about a cultural revival. This has taken place in two stages. At first educated Indians imitated the West in a manner which, if not slavish, was at least uncritical ; in the second stage the growth of political nationalism brought about a sense of cultural nationalism and a return to Indian inspiration in art and literature.

Even their most severe critics do not claim that the British forced their culture on India ; on the contrary, they displayed the keenest interest in Oriental learning, while it was the Indians who insisted on acquiring Western knowledge. When the Government endowed schools of Oriental learning, the great Indian leader Raja Ram Mohun Roy protested that the study of Oriental languages would perpetuate the superstitions from which their country suffered, and they demanded English education as the gateway to the study of Western science.

Western influence showed itself in many ways. The Indian educated classes were brought up on English literature and English ideas. Shakespeare proved one of the best gifts of England to India, where he is almost as much loved as in his own country. Many Indians chose to express themselves in English rather than in their own tongue. In the schools of art, the Western style of painting, so alien to the whole Oriental tradition, was taught. Indian music was neglected ; Indian children learnt to strum upon the piano, very few of them attaining even a moderate proficiency. It was in architecture that Western influence was perhaps most unfortunate, for England was herself passing through that era of bad architectural taste known as " mid-Victorian " ; and when these bad models were transferred to tropical conditions (for which European styles are in any case unsuitable) the results were disastrous. Indian cities are strewn with hideous reminders of this imitative period.

In the later part of the 19th century, national consciousness, itself a gift from the West, developed. It expressed itself in a demand for political reform ; it is this aspect which is most familiar to the outside world. At the same time it had many other forms of expres-

sion, culturally it led to a movement for the rejection of Western culture and a revival of true indigenous culture. It was of course impossible to reject Western influences entirely, they had stamped themselves too deeply on the texture of Indian life. What has emerged is a cultural renaissance, which, owing much to the West, looks back to ancient Indian culture for its inspiration and its models.

In literature the chief feature of the renaissance is the use of the vernacular as the vehicle of literary expression. The classical languages had hitherto been the language of serious literature, Sanskrit for the Hindus and Persian and Arabic for the Muslims though there was a great deal of poetry written in the popular languages. The new dignity of the vernaculars was partly due to Western influences. The Christian missionaries used the vernacular for their writings and extended its use by means of the printing press which they introduced into India. Cultured Indians, whose pens were stimulated by the new ideas pouring in from the West, were not slow in following their example. A whole new literature has been built up in consequence. Western forms such as the novel, the short story and the essay, are copied, but the language and the themes are Indian. Western influence has been marked in the revival of the Indian theatre. There had once been a flourishing Sanskrit drama, which deals almost entirely with the doings of gods and goddesses and the heroes of the Hindu epics, but it had depended on courtly patronage and had died out. All that remained of the truly Indian theatre were the village dramas which kept alive, in a very crude form, the Hindu epic tradition. The English colonies in India, with their enthusiasm for amateur acting, first revived the theatre in India, and gave it something of a social standing. Indians studied Shakespeare at school and college, and found his plays had much in common with the classical Sanskrit drama, it was not long before Shakespeare was being adapted for Indian acting, and plays on Shakespearean lines but with Indian themes, being written. With a few exceptions however, the Indian theatre has not reached great heights and it still retains much of the crudity of the old drama—the lengthy songs, the farcical and sometimes obscene interludes, the crude stage effects. Now the coming of the Indian "talkie" threatens to destroy the Indian stage altogether. It is noteworthy that this latest art takes in the main two forms—one the depicting of the old Hindu epic stories with their gods, mythical heroes and miraculous episodes, the other the social drama, dealing with the great social problems that confront modern India. The Indian talkie has inherited many of the defects of the Indian stage, particularly the lengthy songs and the crude stage effects, but it has to stand constant comparison with the more polished productions of the Western film industry, and is improving. It is an art that is bound to develop and to become more significant in course of time.

The most striking revival has been in the field of painting. In the Indian tradition the emphasis (as in all true Oriental art), is on

line and design and areas of colour, in contrast with the naturalistic school of painting of the West, which strives to present light and shade and depth of perspective. The Western style obtained a hold in India in the 19th century, but produced at best mediocrities. Towards the end of the 19th century, however, Abinindranath Tagore (cousin of the poet Rabindranath) cast away Western models and returned to the Oriental inspiration of India's traditional art forms. He and the school of painters that he founded borrowed also from Chinese, Japanese and Persian sources, styles that were easily blended with the Indian style. The result has been a new school of painting of amazing freshness and vitality.

Rabindranath Tagore is the great figure of the Indian renaissance. The outside world knows him best as poet and philosopher; he was also musician, playwright and producer. He went to the villages for much of his inspiration, and his compositions were based on the lovely Bengali folk songs of the country districts. He did much to rescue folk-dancing from oblivion and to make dancing respectable. Among the upper classes dancing and singing were considered the arts of the courtesan; but Tagore incorporated songs and dances (based on the village dances of Bengal) into his plays, which were acted by men and women of good social standing. Many were first acted by his students in his own University of Santiniketan. Santiniketan is indeed the home of the Indian renaissance, where Indian painting, music, dancing and drama have received all encouragement.

In architecture there are gropings towards a new expression suitable at once for a tropical climate and modern requirements. In New Delhi, English architects attempted a synthesis of Indian and English styles, and while critics differ about the aesthetic merits of New Delhi architecture, there is no doubt that it stimulated a new interest in architecture and started a new school. In the capitals of some of the Indian States, for instance Hyderabad and Mysore, one sees fine new buildings which foreshadow a new indigenous style, creative yet traditional, massive yet light and harmonious. Where artistic expression in other directions has been so significant and so hopeful, one may envisage a new architecture evolving which will be worthy of the Indian national awakening.

WESTERN INFLUENCES IN INDIA

Every Asiatic country has experienced to a greater or less degree the impact of the West. In India the ideas of the West have come largely (though not entirely) through British channels. The British have not forced their ideas and institutions on India, on the contrary, it has always been a principle of British policy to respect the religion and customs of the people of India. In the task of governing India, however, they could not help introducing many of their ideas and methods into the country. And when they developed an educational system for India it was mainly on British lines.

When the British first came to India they had no idea either of conquest or of a civilizing mission. The East India Company had a charter to trade, and it was almost by accident that they acquired large Indian territories. To protect their trade they had to acquire direct rule over some territory. Moreover, the activities of their European rivals, particularly the French, forced them to extend their territory in order to keep them out. Thus in course of time the East India Company found itself the master of a great part of India and in a position of suzerainty over the Indian princes who ruled the rest.

As soon as the East India Company had acquired effective ruling powers the British Parliament intervened and insisted on good government. In 1784 the East India Company was made answerable to Parliament. India was transferred from the control of the East India Company to the direct rule of the Crown in 1858. This meant little difference to either the structure or the spirit of the administration which has developed according to British ideas.

From the first the British set up the ideal of government for the benefit of the governed, and though there have been individual failures that principle has never been departed from. The British administration has been impartial, incorrupt and paternal. One of its greatest contributions has been the introduction of the Rule of Law. Justice in India had been somewhat uncertain, personal law was based on religious codes, but left much room for individual interpretation. In disputes and criminal matters force often took the place of law. Custom and social pressure were more binding than laws. But the British introduced their own legal practices and ideas, and the conception of obedience to a code binding on both rulers and ruled spread.

The British also introduced the conception of law making. To both Hindus and Muslims the laws were considered of divine origin, based on religious revelations, and could not be altered. The British,

as we have seen, respected the personal law of their subjects; but new laws had to be made to deal with commercial matters, and the criminal law was also codified, so that the conception of law as a man-made institution developed. Legislatures with considerable Indian representation were instituted in the latter half of the 19th century, and these ventured to use their powers of legislation to alter social customs. Law as an instrument of social reform is now widely accepted in India, though it still meets with the opposition of the orthodox.

Respect for personal liberty has manifested itself in the history of British Indian administration in many ways. The Rule of Law was in itself a safeguard of liberty. The administration early conceded the freedom of the Press and the liberty of association. The influence of the Government was on the side of social reform, though it was prevented from drastic interference with social customs based on religious injunctions. In 1829, the then Governor-General, Lord William Bentinck, prohibited "suttee" (the burning of Hindu widows on their husbands' funeral pyres), although it was a custom upheld by religion. Slavery was finally abolished by 1860.

But the chief influence of Western ideas has not been through the administrative acts of Government, but rather through the eager assimilation of those ideas by Indians themselves.

The chief medium by which Western ideas percolated into India was Western education. At the beginning of the 19th century Indians themselves demanded English teaching, partly because it was the language of the administration and the door to employment under the East India Company; but also because it was necessary for the study of the sciences of the West, which opened a new world to the educated Indian. Pioneers in the movement for English education were a group of Calcutta Brahmins, of whom the great religious reformer, Ram Mohan Roy, was the leader, working closely with British friends. This group started the first college in which instruction was in English. Later, in 1835, English was officially declared the medium of instruction for higher education. It may be added that this same group were responsible for starting the first newspapers in India, and these have also been a powerful aid in spreading modern ideas.

The beginnings of the modernizing movement in India, dominated by such personalities as Ram Mohan Roy and his friends, form a fascinating chapter in Indian history. Christian missionary influence was marked. Roy and his followers, however, did not become Christians, but they absorbed the ethical teachings of the Gospels on universal brotherhood and love, and became the pioneers of the great social reform movements that have stirred Hinduism ever since. They worked for the emancipation of women, and for the purification of Hinduism from the superstitions that had in course of ages grown round it. It was their support that made possible the abolition of suttee.

It was natural that the ideas of national freedom and democracy, now so powerful in India, should have been largely derived from English literature and history since English has for long been the medium of higher education. At the same time, the uniformity of administration in British India and the linking up of the whole country by modern communications have given the country a physical unity which it had never before possessed in the same degree. When Indians began to demand self-government for their country, it was to English democratic institutions that they looked as a model for their own. Until recently British and Indians alike had in theory regarded the goal for India as Parliamentary government, *i.e.*, government by ministers responsible to a legislature representative of the people as a whole, and there had been a tendency to measure constitutional advance in India by the extent to which it has progressed towards that goal.

Of recent years, however, the nearer approach of a transference of power to Indians themselves has stimulated a sectional political consciousness. The unity of India exists largely as the result of a unified administration, and under the surface there are divergences of culture which make the formation of sectional parties based on religion or culture easy. Minority communities fear that under a constitution on the British model where government is conducted by counting of votes they would always be out-voted and that their religion and culture would be threatened. This has led to separatist demands for political units based on religious and cultural affinities. There have been signs recently that these separatist parties are attracted by the idea of the one party state rather than by the British model which inspired the pioneers of Indian political life.

Although in the earlier years of the British connection there was a great and almost uncritical admiration for the West the growth of national consciousness led later to a certain though by no means universal, reaction from things Western. National pride led to a glorification of everything Indian and a tendency to look back to a legendary "golden age." One expression of this tendency is a religious revival which at times takes a sectarian form. This national self consciousness has had the excellent effect of stimulating a cultural revival. Half a century ago art, music and architecture in India were mostly mediocre imitations of the West, now the ancient arts are being enthusiastically studied and new schools are springing up which have their roots in the ancient soil of Indian culture. This rejection of things Western is possibly but a passing phase, the "growing pains" of young nationhood. Nor is it consistent, for even the most ardent advocates of a return to ancient simplicity do not scorn to use modern inventions. Symbolical of the clash of thought in India today, there stand side by side in Mr. Gandhi's mud hut an ancient spinning wheel and a very modern telephone.

There is a new note being sounded in India today, that of internationalism—an uncertain note as yet, and half drowned in the chorus of resurgent Indian nationalism. The great modern Indians have

always looked beyond the borders of their own country to the world community, none more so than Rabindranath Tagore, perhaps the greatest poet of the modern age. The women's movement and the labour movement, both importations from the West, have international sympathies. The present world crisis has strengthened the tendency to the international outlook. The war is driving home the lesson of the interdependence of nations. Indians are taking a keen interest in world developments, and are eager to make their own contribution to the building up of a new world order.

India is in transition. For the past century and a half, the ideas of the West have been pressing upon her ; many of them are alien to her own, and she is still in process of selecting what is adaptable to her native genius. Politically she is in transition from dependence to full nationhood. The transition period is inevitably full of stresses and storms. Once it is past and the new nation emerges, India will, without a doubt, realize perhaps for the first time the extent of her debt to the West and not least to England, and she will eventually acknowledge it. Then too will come the time when India, out of the vast treasures of her old civilization, will teach her teachers.

FOLK CULTURE

The common people of India, the vast majority of whom live in villages, are the inheritors of the old civilization of India, and often they are more truly linked with it than are the city-bred educated people who no longer have their roots in the old soil. To them, "culture" involves an intellectual process of understanding the traditions of their country, a conscious effort to maintain their contact with them. To the villager, the old culture is part of his being ; he no more thinks about it than a bird thinks how to fly. The average villager is illiterate ; but nobody studying his daily life, and seeing how the old traditions have moulded it into a pattern full of significance, can call the Indian villager uncultured.

The daily lives of the Indian villagers reflect the essential characteristics of traditional Indian culture. Indian life is fundamentally religious. Now Indian religions have been made known to the world through the interpretation of the intellectuals, and it is easy to assume that the great truths and great aspirations are for the learned alone, and that the religion of the common people consists of nothing but superstitions. That is not the case ; while there is much superstition about village religion, the great truths are familiar to the villagers also. They have their own mode of expressing them, in acts of worship, in songs, dance, drama and domestic ritual.

There is much of beauty in the life of the common people. True, their lives are hard, there is much poverty and exploitation, and

many are undernourished. Statistics of earnings, indebtedness, disease, mortality, present a sombre appearance. But statistics tell only half the story: the villager lives a life that is in harmony with the fundamental processes of nature and is integrated with a culture that has stood for many centuries. He has none of the restlessness of the town dweller, and the essential serenity of his life gives him an instinct for beauty and the vitality to express it in beautiful forms and decorations.

The study of Indian folk arts is in itself fascinating; it is of importance too in the general study of Indian culture. The great artistic achievements—the great buildings, sculptures, dramas, epics—have depended on the patronage of princely courts, and these arts have flourished and declined with the rise and fall of kingdoms and empires. But folk culture has persisted through all political changes. And whenever political conditions have been favourable for the cultivation of the finer arts, it is from the rich soil of India's folk culture that the new crop of artistic achievement has sprung.

Perhaps the greatest of all Indian folk arts is music. The air of the villages is filled with music: love songs, lullabies, laments, songs of ploughing and planting and reaping, rejoicings over weddings, aspirations towards God, rise from the villager's lips.

Most of the folk songs spring from the soil; nobody knows their origin. Others are songs composed by the great religious teachers of India that live on in the villages. They have been carefully handed down from one generation to another. Music, even of the classical sort, is not written down in India; it is transmitted from teacher to pupil with the utmost care for accuracy. When we hear a villager singing a song of the Muslim weaver Kabir, the Hindu teacher Tulsī Dās, or of Guru Nanak, the founder of the Sikh religion—all of whom lived four and five hundred years ago—we may be sure that we are hearing something very like the original. Illiterate as the villagers may be, these great classics are a part of their inheritance.

Indian folk music is for the most part deeply impregnated with religion, and is thus a true reflection of Indian life. Many of the songs are prayers of praise and petition. In Bengal there is a class of religious mendicants, the Bauls, whose songs enshrine profound mystical teachings; they wander over the countryside singing their songs, which are listened to with rapt attention by the villagers.

Indian folk songs are of great interest from the musical point of view, though their merit varies from place to place. The boat songs of the West Coast, for instance, use a restricted scale of three to five notes and are little more than monotonous chants. Many of the boat songs of Bengal, on the other hand, are musical masterpieces. Rabin dranath Tagore, who was as great a composer as he was a poet, based many of his lovely melodies on the boat songs of Bengal, just as he borrowed the ideas of many of his mystical poems from the songs of Bengal's wandering mystics.

Folk dancing is closely allied to music, and is as fundamental to Indian village culture. There are many varieties of dances. Many are religious, connected with the big festivals; others celebrate the events of village life—planting, reaping, threshing, hunting; others are danced at weddings.

Nearly all village dances are accompanied by singing. They are usually danced by groups, and a very common device is that of the leader and chorus, the leader giving a line of the song, and the chorus repeating it while the dance movement is also repeated. Whole stories are told in this way—usually Hindu epics. Groups will often chant topical songs composed on the spur of the moment; they may be about a new building, a distinguished visitor who is watching them, or resistance to Japanese invasion—whatever exercises their minds and inspires them to express it in song and dance. Some of the agricultural dances representing sowing or reaping are done by men holding sticks in their hand; they bear a strong resemblance to the agricultural dances of Europe. If they have a common origin they must be immeasurably old.

The dances, like the songs, are of varying artistic merit. Some of them are rhythmic shufflings hardly worthy of the name of dancing; the festival dances of some of the aboriginal tribes such as the Todas and the Gonds are of this character. On the other hand, the harvest dance of the West Coast is a highly developed art. It is a round dance done by young girls; arms and bodies sway with vigour while the feet trace a syncopated rhythmic pattern.

Indian handicrafts are of immemorial antiquity. Most of the arts practised in India now were known in Vedic times. Writings more than two thousand years old describe the organization of craftsmen into eighteen guilds, and the custom, which still exists, for craftsmen of the same craft to live in a certain street or quarter of a town, or even a separate village. The technique of these craftsmen has been handed down practically unchanged for thousands of years. Designs, too, are traditional. Many of the familiar Indian designs are not merely decorative but have a religious significance, for instance, the circle, the swastika and the lotus.

Indian textiles have been famous since the days of the Greeks and the Romans. The competition of the machine has severely damaged the hand industry, but hand weaving is by no means dead. In many places the inherent good taste of the people still chooses the hand product and the traditional design. There are some two million handloom weavers in India; and apart from the substitution of the fly shuttle for the hand shuttle, the technique has not changed since classical times. Some of the old stuffs are no longer made, for instance, the almost legendary Dacca muslins, but the traditional patterns are still woven on the hand-loom of Benares, Kashmir or Masulipatam.

There are many kinds of embroidery done by the peasant women. In the Punjab the women embroider the coarse dark red handspun

cloth of the village with the gayest of silk in either flower or geometrical patterns they make bedspreads and wraps in this way. In Bengal the women make *kanthas*, spreads and wraps by quilting together old saris and working patterns in chain stitch on them. Each woman designs her own pattern, some follow traditional lines with a lotus centre and designs of conch shells and other symbols, others have patterns of human beings and animals illustrating the old stories. Another type of embroidery found mainly in Gujerat has numbers of tiny round pieces of looking glass bound down with chain stitch at the centres of flowers or at birds' eyes which gives a remarkably gay effect.

Articles of common use are often beautiful in themselves or beautifully decorated. The humblest earthen pot has a pleasing shape, many of the water jars are either painted or have embossed designs on them. Wooden articles are frequently carved. In the Punjab bright enamels, chiefly red and yellow, are applied to beds, stools, spinning wheels. Basket work is often done in gay colours, purple, green and yellow being common.

In village buildings of the better sort one may see carved door posts, door pillars and shutters. The great art of fresco-painting which gave the world the treasures of Ajanta still survives in some places. In Benares and Tanjore, both religious centres, there are still streets of craftsmen who practise the art. They use crude and ephemeral materials and will paint a house wall for a few rupees to decorate it for some special occasion. Using the traditional forms they produce paintings of striking beauty within these limits. In many country districts the instinct for wall decoration still persists and you may see crude but pleasing drawings on the walls of the village houses.

There is so much of beauty and of charm in the Indian village that it would be easy to sentimentalise over village life. The villager's life is by no means idyllic, there is much in it that is bad and cries out for reform. But there is also much in it of permanent cultural value. No people if they were utterly downtrodden and wretched could find the heart to create so much beauty. If rural reconstruction were to destroy the folk arts and the simple unspoiled mentality out of which they take their rise, India would lose something that is an essential part of her characteristic civilization.

With the competition of machine-made goods, the seed of decay has already entered. As elsewhere in the world, the villager has no conscious appreciation of the beauty of his own culture and tends to choose the cheap but glittering novelty of the machine-made article when it is placed within his reach.

At the same time, however, the sophisticated townsman under the impulse of the national movement is moving away from Westernization in art and trying to return to the roots of his own culture. He sees that in the villages an Eden is being lost and he is

trying to regain it. Scholars are studying the arts of the village ; the artists, the musician, the dancer go back to the village for inspiration in building up a new Indian culture. Tagore found his music there ; Uday Shanker bases many of his dances on village dances ; Jamini Roy's ultra-modern pictures are nothing but a sophisticated rendering of the folk painting of Bengal.

Lost Edens are not easily regained ; and an immense effort is needed to achieve something like the primeval beauty of an unconscious folk art. But even this deliberate seeking of inspiration from primitive models has more vitality about it than the imitation of Western models which was characteristic of an unhappy phase of India's artistic life in the last century. The self-conscious and sophisticated art that is emerging is a truly Indian art, rooted in the soil of a centuries-old culture.

THE ABORIGINAL TRIBES

When people speak of the antiquity of Indian civilization, they usually have in mind the civilization of Vedic India from which modern Hinduism is a direct descendant, or perhaps the ruined cities of Mohenjo-daro and Harappa, whose connection with historic Indian culture is still in dispute. But there are in India remains of a culture still more ancient, the aboriginal tribes whose ancestors, so far as we can ascertain, were the first inhabitants of the land.

There are over 25 million people classed as aboriginals in India. Their racial affinities are obscure. The bulk of these are of a type described by an eminent anthropologist as "Proto-Australoid", connected with the aboriginals of Australia. In the Andaman Islands the type is negrito, while in the hills of Assam a distinctly Mongolian type is found.

As everywhere in the world where a more advanced civilization has come into contact with a primitive one, the latter has disintegrated. As the superior and better-organized culture of the Aryans spread in India, the original inhabitants were either overwhelmed, or absorbed into the lower strata of Hindu society, or driven out of the plains into the mountains and forests. The process of absorption has been going on for many centuries ; many of the descendants of the aboriginals are no longer recognizable as such. But of the people now classed as aboriginals some twenty million have lost the essential characteristics of tribal civilization, though they may retain a number of its customs. But pockets of the old primitive people remain in the remoter districts, in the forests and the mountains, and they have preserved their primitive culture almost intact. These number only a few millions.

While there are variations from tribe to tribe, the life of the aborigines presents certain marked characteristics everywhere.

The people are essentially forest dwellers, and their whole life is integrated with that of the forest. They are cultivators, but their agriculture is of that primitive type known as shifting cultivation. They do not use the plough, but cut and burn down a portion of the forests through which they roam and plant their seeds in the rich forest soil. (In some tribes ploughing is regarded with horror as wounding the breast of the Goddess Earth.) A plot thus cleared will be cultivated for two years, after which the forest people shift their cultivation to another plot. They hunt and fish, and also consume the roots, fruits and honey which they find in the forest.

Their life is communal. In the tribes the least touched by civilization, the houses of the village are built round a common courtyard and all activities are shared by the whole tribe. A usual feature is the "bachelors' dormitory" or clubhouse, where the young men of the village live together and learn the tribal traditions and customs. There is little or no property in land though certain areas of forest are regarded as more or less the domain of a particular tribe. Cultivated land belongs to the community and clearings are distributed for cultivation by agreement. In many villages there are corporate granaries and grain is shared according to need.

Life is rich in many ways. They rejoice in the beauty of their forest surroundings and express their joy in festivals attuned to the changing seasons. They know above all the art of recreation, their songs, tribal dances, tribal games, are full of joy. Among themselves they are simple, truthful and honest. It cannot be denied, however, that their lives have many drawbacks: gross superstitions, cruel practices such as infanticide and witch hunting, famines when their meagre resources fail them, diseases such as malaria against which they are helpless. But on the whole they are happy people, with a culture perfectly adjusted to the conditions in which they live.

Contact with more advanced cultures has led, not to their becoming civilized, but to their degradation. Tribal life is destroyed, the social structure that gave meaning to their lives disappears. The tribesman becomes an isolated individual without moral standards or social sanctions, and his degradation is practically inevitable. In many areas of the world contact with western civilization has all but wiped out primitive peoples who have been unable to stand up against the diseases and vices which western people brought with them.

In some ways contact with Hinduism has not proved so destructive to Indian tribesmen as culture contacts of primitive peoples with more advanced people in other parts of the world. For Hinduism has a remarkable absorptive power, and has absorbed rather than destroyed the tribes. Religiously there was little difficulty in absorption, the tribesman had no objection to adding a few Hindu gods to his pantheon—nor did the Brahman priests object to becoming the attendants of a few tribal gods and thus extending their own influence. The Hindu pantheon has in fact reached its present bewildering

complexity by this process of absorption. Socially the aborigines presented no difficulty to the Hindu ; they were outcastes in his eyes and could easily be assimilated to that vast class of untouchables at the bottom of the social scale, who are in Hinduism and yet not of it. To the unsophisticated tribesman it connotes a rise in the social scale to be able to claim caste at all ; he is hardly aware that he is relegated to the lowest and most degraded status. This process of assimilation is still going on ; indeed it has been hastened recently through political considerations, since voting power is now distributed according to religious communities.

Strangely enough, tribal memories die hard ; and some of the lowest of the untouchables still remember that their ancestors once owned and ruled the land where they are now considered only fit to be scavengers.

The British administration has been far more stable and efficient than any previous administration ; these qualities, however, worked to the detriment of the tribespeople, for they made possible the opening up of tracts hitherto untouched by civilization, and hastened the process of tribal decay. Thus the effects of British rule have in the main been unfortunate, though in recent years, as anthropological knowledge increases, every effort has been made to protect the aborigines from the disintegrating effects of modern life. The closer contacts between aborigines and educated plainsmen proved disastrous. The plainsman was able to insinuate himself, as moneylender, tax gatherer or petty official, into the tribal areas ; little by little he got the innocent tribesman under his control, and through his superior education was able to cheat and despoil him of his lands. Moneylending was the chief means by which the aborigines' lands were filched from him. The introduction of the British system of lawcourts and methods of law proved disastrous to the aboriginal—as indeed they did to many a cultivator in the plains—for the better educated moneylender knew how to make use of their machinery to establish his claims, while the innocent and ignorant tribesman was quite unable to defend his right. In many places the aboriginal now tills the land as a landless labourer where once his ancestors roamed as free men.

Stricter control of the forests has also worked to his detriment. The custom of shifting cultivation is harmful to the forests, and the Forest Department has made every effort to stop it and to induce the aborigines to settle in fixed places and take up cultivation with the plough. But to many of the tribes shifting cultivation is not merely a method of agriculture but a way of life, bound up with their tribal religion and customs. To persuade them to change their habits is to strike at the cohesion of tribal life. Restrictions on hunting and fishing, made in the interests of the community as a whole, have also interfered with tribal customs and weakened social cohesion.

Attempts to educate the aborigines have not on the whole met with success. The aboriginal boy goes to a primary school, usually

run by a plainsman who despises him and makes him feel his inferiority. He is taught the three R's, is given a veneer of civilization, and taught to despise his own traditions. But what he is given does not replace what he has lost, and he emerges from school with a feeling of inferiority that does not contribute to his advancement.

A few make good. A Khasi hill woman from the Assam Hills has become a Cabinet Minister. Some of the tribal aristocracy use their wealth to acquire the best of western education, while retaining a firm hold on their traditions. But for the most part the culture contacts of aboriginal and plainsman remain a problem requiring careful and sympathetic handling.

"There is no possibility," writes Mr. Verrier Elwin, an English man who has himself lived the life of the aboriginal for many years, "of substituting civilization for primitiveness, the only alternative to primitiveness is decadence". The aboriginal tribes need special protection and treatment if they are not to sink to the dregs of social life or to be exterminated.

The need for special treatment was not at first recognized by the British, but by the middle of the 19th century it was realized that the tribes presented a separate problem. "Non regulation" areas were set up where the ordinary laws did not apply, these areas were those in which the population was predominantly tribal, and they were administered by officers with special knowledge of and interest in such people. By the Government of India Act of 1935, certain tribal areas were classed as 'excluded' or partially excluded from the working of the Act. Such areas became the special responsibility of the Government of the Province in which they were situated. The intention of these provisions was to keep these people out of politics until they were ready for it, and to prevent them from becoming pawns in the political game.

It has, however, proved impossible to define clearly the areas inhabited by the aboriginals, since in the course of time they have intermingled with the more sophisticated people of the plains. But the policy has had good results in many places. It has been particularly successful in the mountains of Assam, where the sturdy and martial tribesmen have been able to preserve their independence to a remarkable degree. Customs such as head hunting have been put down; but they are allowed to develop in the main according to their customs, and education, medical and improved agriculture are being introduced only gradually.

Nobody proposes that the aboriginals should be kept in their present state for ever, as a sort of museum for anthropologists. But it is now recognized that the only way to deal with the problem of the aboriginals is by a slow process of adjustment to modern life, which will preserve the best elements in their own culture. This process can only be carried out by those who understand their culture thoroughly, and are prepared to give sympathy and understanding to these people of another age.

THE GREAT EPICS

India, like classical Greece, has two great Epics, which relate the doings of gods and godlike heroes. The stories are probably based on actual happenings in the dawn of Indian civilization ; but they have been so embellished in the course of time that their value as history is small. None the less, their study is of great importance to the understanding of Indian culture. Not only do they give us a vivid if somewhat fanciful picture of ancient India ; but they have become part of the living tradition of the country.

The Mahabharata is the story of a fratricidal war between two closely-related princely houses. Scholars believe that the war which is the subject of the Mahabharata took place about the 13th or 14th century B. C. But in course of time legends, songs and stories were incorporated in the epic, mythical and miraculous elements were added, until the real story became buried under the mass of added invention. Moreover, as always happens in India, the story was invested with a high moral tone ; and moral precepts, legal codes and rules of caste conduct were also woven into the fabric. The Sanskrit version which we now have, and which took shape about the 5th century A. D., contains over 90,000 couplets. But out of this mass it is possible to select the main threads of the story.

The kingdom of Kurukshetra on the banks of the upper Ganges was inherited by two brothers, Pandu and Dhritarashtra. Pandu died, and left his five sons, known as the Pandavas, to the care of his brother. The latter had a hundred sons, known as the Kuruvas, and the rivalries and jealousies of the cousins form the main theme of the epic. The eldest Kuruva, Duryodhana, is the villain of the piece, while the role of hero is more or less shared by all five Pandavas. Yudhishtira, the eldest, stands out for his gentleness and wisdom, while Arjun, the third, is the greatest warrior.

Yudhishtira was chosen as heir to the throne : this so enraged Duryodhana that he laid a plot to trap all five brothers and their mother in a lonely building and set it on fire. They managed to escape, however, and took refuge in a potter's hut. But they could not long remain hidden. In a neighbouring kingdom was a beautiful princess, Draupadi. Her father Drupad set a contest for all suitors for her hand ; they had to bend a magic bow and shoot at a distant target. Many came and failed even to lift the bow ; but Arjun passed the test and won the bride. His prowess in arms led to his being recognised, and Drupad gladly welcomed him as a son-in-law and made an alliance with the Pandavas.

There follows a curious episode : when the Pandavas brought the Princess home to the potter's hut and told their mother they had

won a marvellous gift, she said, not knowing what the gift was, 'Share it between you!'" And Draupadī became the wife of all five brothers. This is completely against Hindu custom, but it may refer to a prehistoric period when polyandry was practised in India. However, it is clear from the rest of the story that Draupadī was regarded as Yudhishtira's wife, this would imply a respectful gesture from the younger brother to the elder, quite in accordance with Hindu custom.

Supported by his new ally, Yudhishtira now demanded half the kingdom of Kurukshetra, and Duryodhana was forced to give it to him. But Yudhishtira had a weakness, a love of gambling. Duryodhana invited him to his capital for a game of dice—but the dice were loaded and Yudhishtira lost game after game. He staked all his wealth, his houses, his elephants, his kingdom—his brothers, himself, and finally the beautiful Draupadī—and lost them all! So he and his brother and Draupadī became slaves at the Kuruva court. But the old king Dhritarashtra intervened and had them released from actual slavery, on condition, however, that they accepted banishment for twelve years.

After twelve years Yudhishtira again demanded his kingdom, but Duryodhana refused to allow its restoration. War became inevitable. There followed an eighteen days' battle, described in the epic with a wealth of detail. The Pandavas triumphed and with the death of Duryodhana the war came to an end. The closing books of the epic give a description of the burning of the bodies of the heroes on the banks of the Ganges, in accordance with traditional Hindu custom, and of the great horse sacrifice performed by Yudhishtira on his restoration to his kingdom.

No description of the Mahabharata is complete without mention of the Bhagavad gita 'the Song of the Lord'. The god Krishna takes human form and joins the Pandava brothers as a charioteer. When Arjun hesitates on the eve of battle to slay his own kinsfolk, Krishna in this beautiful song explains the whole duty of man in society, which may even include slaying his fellow men if it is necessary to defend the right. The Bhagavad gita contains the essence of the ethical and social teachings in Hinduism, and has had a profound influence on the outlook of countless generations of Hindus.

The Ramayana is much shorter than the Mahabharata. It consists of 24,000 couplets, and shows evidence of being the work of one hand. It is reputed to have been written by Valmiki, a hermit who lived in the days of Rama and plays some part in the history.

It is the story of prince Rama and his lovely wife Sita. Sita was a princess of miraculous birth, having been born of an earth furrow. Her father decreed that none should wed her who could not bend a miraculous bow. Many tried and failed, till Rama, son and heir of the neighbouring king of Ayodhya (modern Oudh), not merely bent the bow but broke it, and won Sita for his wife.

Rama's father, who was ageing, decided to make Rama Regent and leave the administration of the kingdom in his hands. But Rama had a stepmother who was jealous of him, and she persuaded his father to banish him for fourteen years and make her own son Bharat the Regent. Rama, ever the perfect son, accepted the decree of banishment, and prepared to take a long farewell of Sita ; but she, for once disobedient, refused to be parted from Rama and came with him into banishment. His younger brother Lakshman also elected to share his exile, and the three went to the forests of Central India, where they were kindly received by the hermits who were their sole inhabitants. There they built a hut and lived as simply as did the hermits.

Their peace did not remain undisturbed, for Ravana, the demon king of Lanka (modern Ceylon) found their retreat and fell in love with Sita. One day when the royal brothers were out hunting, he seized her and carried her off to Ceylon. He tried to make her forget Rama and marry him instead ; but in spite of his blandishments and the tormentings of a band of demon women, she remained faithful to her human husband. Meanwhile the monkey god Hanuman came to the rescue. He and his followers tore rocks from the Himalayas and built a bridge with them from India to Ceylon for the passage of the royal brothers and their army. After a number of fierce battles the demons were defeated, Rama killing Ravana with his own hand, and Sita was rescued.

But Rama was led to doubt her fidelity, for she had dwelt a long time under Ravana's roof. On being accused of infidelity, Sita boldly demanded the trial of fire. A pyre was lit as for a funeral ; fearlessly she stepped on to it—but the flames rolled back and refused to touch her. Rama accepted the verdict of the flames, and they returned in triumph to India. His period of banishment was now over, so he claimed his throne, and there followed years of peace and prosperity.

But alas, the people of Ayodhya believed the evil stories about Sita, and demanded her banishment. Rama gave way to the clamour of his subjects, and banished Sita to the forests, where she found refuge with the hermit Valmiki. In his hermitage she gave birth to twin boys who grew up as Valmiki's pupils.

Rama never forgot Sita, but devoted himself to his duties as a king in spite of the emptiness of his heart and home. To win the favour of the gods, he performed a great horse sacrifice. Valmiki came to the ceremony with the two boys, now full-grown : and there he made them chant the great poem he had written. Rama recognized the two young minstrels as his children ; and at the sight of them he repented of his stern action against Sita. He asked Valmiki to bring her to his palace, that she might once more prove her purity before the assembly of the people and he might take her back with the approval of the people.

Sita came, but her heart was broken. She could no longer bear the suspicions which had clouded her life and at the sight of Rama she implored the earth which had given her birth to receive her back. And the Earth opened and took her suffering child into her bosom.

These stories are known by heart by high and low in India, and the characters are as real to the Indian people as the members of their own families. They inspire them with the memory of the heroic age, and hold before them the examples of noble men and women actuated by high principles, courageous, dutiful, patient in suffering and magnanimous in triumph.

Perhaps the story of Rama and Sita is even closer than that of the Mahabharata to the heart of the Indian people. Its characters and episodes are familiar even to non-Hindu peoples. The Ramayana has been translated into the major Indian languages. These translations were made when these languages were taking their modern shape and they have exercised an important influence on the development of the language. The Hindi version of Tulsī Dās is the most significant of these translations for it is known over the wide area where Hindi and closely related languages are spoken. Popular renderings of it are sung by village bards, grandmothers tell the stories to the babies as soon as they can understand words. They are linked to Hindu worship. Episodes are carved on the temple walls, temple festivals celebrate the victory of Rama over Ravana, and images of the great hero and his wife are carried in temple processions. The story also furnishes themes for the shadow plays and temple ballets of South India. Modern India keeps the tradition alive, the story has been filmed in the most beautiful of Indian films "Ram Rajya" (the reign of Rama), and Hindu families go to see it as to a religious ceremony.

Rama is the perfect man, Sita the perfect woman, whose lives of duty and courage whose fortitude under trials are an inspiration to Hindu people. In course of time Rama has become deified and is now generally regarded by pious Hindus as one of the incarnations of the god Vishnu. His reign is considered the golden age of Hinduism to which Hindus look back and to which they should strive to return.

"To know the Indian Epics is to understand the Indian people better. So wrote Romesh Chandra Dutt, to whom the English-speaking world is indebted for beautiful metrical translations of the main portions of the epics. "They have been the cherished heritage of the Hindus for three thousand years, they are to the present day interwoven with the thoughts and beliefs and moral ideas of a nation of two hundred millions.

SCIENCE IN INDIA

India is one of the most ancient homes of human civilization ; thousands of years ago she built up a tradition of intellectual activity, and developed great systems of philosophy. At the same time the knowledge of her ancients embraced a wide field of what we call science. In modern times she is again producing scientists second to none in the world. It is of interest to trace India's scientific history and assess her contribution to science.

In ancient times India's chief interest was in spiritual knowledge, and it is in the field of religious speculation that she made her chief contribution to human thought. The pursuit of Ultimate Reality was no bar, however, to the study of the physical world ; indeed, physical sciences were regarded as part of spiritual knowledge and a help to spiritual enlightenment. A great many different sciences were recognized ; the list given in one ancient text includes grammar, logic, fine arts, rituals, as well as mathematics, astronomy and the natural sciences. But in the main, the interest of the Indian sages was in Ultimate Reality, and in the pursuit of the higher knowledge intuition played a larger part than pure intellectual activity ; perhaps that is why Indian thought never developed such systems of logic, mathematics and natural science as were built up in ancient classical Europe.

Scientific knowledge first developed in India, as elsewhere, out of the practical needs of religious worship. Sacrifices had to be performed under certain conditions to be efficacious—on altars of a certain size, at certain phases of the moon or certain conjunctions of the stars. These demands of ritual enforced precision of calculation, and stimulated the development of mathematics and astronomy. Vedic India had considerable knowledge of algebra and geometry ; we have evidence that Pythagoras' theorem was known in India at least four hundred years before the Greek philosopher lived. But India never developed a formal system of geometry comparable with the Euclidean system. One of India's greatest contributions to civilization was the decimal system of numeration. So highly developed was the science of numbers in Vedic India that we find names for numbers up to the 14th power of 10.

Medicine was also highly developed. It seems to have received a powerful stimulus from Buddhism, which enjoined compassion on the sick and led to the extension of hospitals. The old system of Ayurveda (literally " science of life ") is still extensively practised in India, though by now it is restricted to herbal medicine and massage. But in old times the system had a broad sweep ; place was given for experiment and research, surgery was practised, and the importance of dissection for medical study was understood. Ancient India had some grasp of the system of circulation of the blood, and the existence

of germs was guessed at. Medieval European medicine owed much to India indirectly, for Indian physicians taught the Arabs and the Arabs in their turn taught the Europeans.

Invasions and internal disturbances broke the continuity of India's scientific tradition. By the time the British were established in the country, much of the old culture had stagnated or decayed, but contact with the West stimulated the renaissance of Indian scientific progress.

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The Indian cultural revival has many aspects and the revival of scientific learning is one of the most inspiring. At the beginning of the 19th century, when large parts of the country were already enjoying peace and order under British protection, Indians turned with enthusiasm to the West for scientific knowledge. It was largely the desire for Western science that persuaded the pioneers of Indian social reform to use English as the medium of instruction in their educational institutions. But for a number of reasons scientific studies made but slow progress. Learning was in a foreign tongue, a drawback to all but the best students. Poverty prevented the development of adequate laboratories. Universities were mainly teaching and examining bodies and only recently has independent research come to be regarded as an essential function of a University.

Twentieth-century India has produced a number of scientists of outstanding merit—so much so that one might say that modern India has a peculiar genius for science as ancient India had for religion. The first of these great scientists was Jagdish Chandra Bose, who startled the scientific world in 1896 by his demonstrations in short wave wireless. Later he turned from physics to physico-physiological investigations. His great contribution to the study of plant physiology was the discovery that plants respond to stimuli in the same way, though to a lesser degree as animals, and he showed also that many of the effects of stimulation shown by living tissues were shown also by non living tissues. He was also remarkable for the extremely delicate instruments he devised for his scientific experiments. In 1917 he founded his own Research Institute where studies in biophysics are still continued. He claimed that his scientific investigations bore out the truths taught by the Vedas that all Nature was one. An eminent fellow scientist, Sir J. C. Ghose, has written "Future historians of science may find the introduction of this pantheistic standpoint an important contribution of the Indian mind to the scientific conception of Nature."

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Meanwhile another scientific institution had seen the light of day, the Indian Institute of Science at Bangalore, which was opened in 1911. It owed its origin to the vision of the great Indian industrialist, J. N. Tata, whose travels in Western countries and Japan had convinced him of the importance of science as the basis for industrial advance. The Institute was at first designed for industrial research, and applied science has remained its chief activity. It analyses Indian raw materials and experiments with processes. Its

researches have been directly responsible for the establishment of a number of new factories in the vicinity, and it has rendered scientific assistance to industries all over India. Of recent years the Institute has developed research in pure science. In 1931 Sir C. V. Raman, the noted physicist and Nobel Prize winner, became its director, and it has since been associated with his researches and those of another eminent Indian physicist, Dr. H. J. Bhabha.

Sir C. V. Raman is the first Indian—indeed the first Asiatic—to receive the Nobel Prize for Science. He was awarded the prize in 1930 in recognition of his researches into the behaviour of light ; he has also made contributions in many other fields. His astonishing versatility is perhaps unsurpassed by any living scientist. He is not only a brilliant physicist but a leader of a movement ; both in Calcutta, where he was for many years Professor of Physics in the University College of Science, and in Bangalore, he has inspired groups of Indian scientists to carry on research work.

There now exists a solid body of Indian scientists of international reputation who have made notable contributions to the advance of scientific knowledge, and these form the leaders of many schools of scientific studies where young Indians are trained in the scientific approach to life.

In spite of the lack of financial resources which has hampered India's progress, science has been applied to many of her problems, industrial, agricultural and medical, in research institutions. Both Government and private funds have been devoted to research. Conspicuous among Government institutions are the research stations devoted to the improvement of agriculture : the Imperial Agricultural Research Institute, founded in 1905, the Forest Research Institute at Dehra Dun, founded in 1906, and the Animal Husbandry research stations. To-day these are staffed almost entirely by Indian scientific workers, some of whom have won world-wide recognition in their own field.

Again, there is considerable medical research going on in India. Much of this has been rendered possible by the generous grants of the Rockefeller Foundation, who give large sums to the All-India Institute of Hygiene and Public Health in Calcutta, and the Pasteur Institute in Coonoor. The Government of India also give considerable grants to these institutions. These funds are administered by a body known as the Indian Research Fund Association, on which private and Government interest are both represented, and which combines Government financial support with the freedom of private initiative. This body also finances the Malaria Institute of India. These various Institutes have conducted valuable researches in medical and public health problems ; their chief contributions have been in the fields of malaria and nutrition. All of them also conduct schools and courses for the training of health workers.

All these researches have as yet had a limited effect on the public health of India, for the trained workers are few and the problem vast ;

but, thanks largely to the labours of Indian scientists, the scientific knowledge necessary to its solution now exists, and with the spread of education, it may be expected that great strides forward will be taken

GREATER INDIAN CULTURE

India has in the past had an Empire far outside her own borders, but it has been an empire of the mind and spirit rather than an empire of military conquest and commercial exploitation. For India has been a great cultural influence over Eastern and South Eastern Asia. She sent out her religious influence over China, Korea and Japan, while in South East Asia, in Indo-China, Siam and Indonesia, Malaya and Burma, kingdoms were established which were Indian not only in religion but in language and culture.

There is no connected written record of this period. As Kalidas Nag, the great Indian authority on East Asian culture, has truly said: "The traditional habit of writing history out of literary documents coming mostly out of the 'civilized' epoch has long deprived countries like India, China and Japan of the light radiating from non literary sources such as the evidences of archaeology and anthropology." It is only recently that scholars have begun to piece together the history of India's cultural conquests. "This colossal cultural drama," continues Kalidas Nag, "is reappearing to us like an ancient mutilated play with many acts and interludes still missing, which future research alone would probably restore and reconstruct."

For the past four decades scholars of many nationalities, Indian, French, Dutch, English, Siamese, have been working on the task of reconstructing this lost history from whatever evidence is available. The Chinese records contain many references to South East Asia. Epigraphy is important, inscriptions yield not only the direct evidence of fact and date but the indirect evidence of the script and the degree of skill with which they are executed. These countries are rich in architectural and sculptural remains, which give significant evidence of Indian influence. The existing culture of the peoples of these regions also gives evidence of past cultural contacts, their dances and dramas, their very clothing and jewels, show the cultural influence of India.

As far as we can make out, there were Indian or Indianized kingdoms established in what are now Siam, Cambodia, Champa, Sumatra and Java, at various times between the first or second century A.D. down to about the 15th century. But even before these kingdoms were established there were contacts between India and South-East Asia. It is probable that from prehistoric times there were trade connections with South-East Asia via Malaya; it is suggested by some scholars that what clothing was worn in that part of the world

came from India, where the arts of spinning and weaving were very ancient. In the Ramayana there are allusions to Yavadvipa (Java) and the Buddhist Jataka stories tell of ships sailing down the Ganges into the open sea and directing their course eastwards to the rich lands beyond the sea.

Exactly when or in what manner the Indian kingdoms emerged we cannot tell. We may speculate that the missionary zeal of Buddhism had some influence on the process of driving Indians out into far countries; but there seems to have been as much of Brahminical influence as of Buddhist. The first definite record of political contact is found in a Chinese manuscript, and relates to Cambodia, called by the Chinese Fu-nan. This states that in the first century A.D. the queen of Fu-nan submitted to a Brahmin conqueror, Kaundinya, after a naval battle; he married the queen and—as she had no clothes—gave her clothes. He founded a dynasty which ruled Cambodia for some time. The same story appears with variations in later manuscripts; one describes the queen as a snake goddess. The Chinese records continue to give details of the history of this kingdom for about five centuries; there are references to one of the kings of this Indian dynasty being given the title of "General of the pacified South" by the Chinese Emperor, though it is not clear what the significance of this title is. There seems to have been a fresh wave of migration from India in the middle of the 6th century A.D., for after this there are many Sanskrit and Khmer inscriptions to continue the story.

It appears from the inscriptions that both Buddhism and Hinduism flourished; there are temple inscriptions referring to the daily readings of Hindu epics. Many of the inscriptions are bilingual; two scripts are used, a South Indian script, and a Sanskrit script of a Bengali type. Architecture shows great Indian influence; the inspiration of the famous temple of Angkor Vat, built in the 12th century, is Hindu, as are many others. But the style was also influenced by China, and eventually evolved into something truly indigenous. Chinese influence showed itself in the use of glazed tiles, and there are other un-Indian features such as towers with human faces, pillars made of human forms, and balustrades of winged snakes. Angkor Vat is neither Indian nor Chinese, but essentially Cambodian. But the religious cults remained Indian, with local developments such as the deification of royal ancestors.

The building of Angkor Vat was the culmination and also the end of Cambodian glory; the kingdom came under Siamese influence and its special culture declined. But Indian influence has survived among the people, and can be seen in the folk dancing and in the minor arts such as weaving which were learnt from India.

Siam also shows a strong Indian influence. The earliest images of a Buddhist character and definitely Indian style date from the second century A.D., and in the early years of the Christian era the use of Sanskrit was widespread throughout the country. Siam seems

to have remained a predominantly Buddhist country as it is at the present day but there are Hindu features discernible also. Siam developed its own distinctive architectural styles based on Indian inspiration. To this day the Indian influence is clear, Siam has a dance drama similar to that of Malabar which celebrates the Hindu epics and the minor arts of weaving, jewelry making, lacquer work derive much inspiration from Indian models.

In what are now the Netherlands East Indies Indian kingdoms flourished of which the culture contained strong Indian elements. Sumatra and Java in particular showed these influences. What may be called Hindu Sumatran culture flourished from the beginning of the Christian era to about the fourteenth century. Contacts with India were close and various changes in political fortunes and cultural developments in India itself were quickly reflected in Sumatra. The evidence of architecture, sculpture and inscriptions seem to indicate that contacts with South India were strong from the 7th to the 11th centuries. But there were connections with North India also. In the 8th century a Sumatran king married a Bengal princess and donated the money for a monastery at the famous Buddhist centre at Nalanda. There was a considerable Indianized Empire in existence at the time the Sailendra Empire which dominated the narrow seas and Malaya and extended its influence to Java and even to Indo China. One theory about its rulers is that they belonged to a powerful South Indian dynasty who had come to Sumatra via Malaya. It was about this time that Mahayana Buddhism and the Sanskrit script reached Sumatra, probably brought by these kings. The Sailendra Empire lasted for about six centuries but finally weakened through a series of disastrous wars and collapsed through the attacks of the Siamese from the north and the Javanese from the south. But while it lasted it promoted a remarkable civilization. It is to this Empire that the world owes the greatest of all Buddhist monuments, the shrine at Borobudur in Java. The architecture and sculptures of this are profoundly Indian in both theme and style.

Java is in many ways the most interesting country from the point of view of greater Indian culture, for it contains not only such monuments as Borobudur but in the living culture of Java the Indian influence is still most marked. Inscriptions inform us of Hindu kingdoms in Java in the fourth and fifth centuries A.D. but with the expansion of the Sailendra Empire into Java Buddhist influence became predominant. What developed was no imitation of Indian culture but an essentially Javanese culture with its own forms of expression. Its religion was a mixture of Hindu and Buddhist doctrines while the popular beliefs contained still a large element of animism. After the fall of the Sailendra Empire a considerable Javanese Empire grew up which made conquests as far as the Philippines and Borneo but it declined in the 15th century.

The Greater Indian civilization with its distinctly Hindu and Buddhist elements began to decay with the advancement

of Islam in Eastern Asia. With the Turkish conquests in India, the cultural contacts with India herself began to be weakened, though trade connections were still important as late as the 16th century. Then, as Islam spread first through Indonesia, the Hindu-Buddhist character of these countries changed. They did not develop a strict form of Islam, and underneath it the old beliefs and cults continued; but the leadership of the people was in the hands of the Muslims, and the old culture no longer led to great works of art and architecture. In so far as they survived, it was in the folk culture.

It is remarkable, however, how much has survived in spite of the centuries-old loss of contact with India. Through practically the whole of this region, and particularly in Java, the epic stories of the Ramayana and Mahabharata are an essential part of folk culture, and everywhere they receive the same form of artistic expression, the dance drama, which is found in India on the Malabar Coast. In Java the shadow play flourishes; and while this form of drama is probably Chinese in origin, the themes are Indian. It is extraordinary how the Muslim countries of Malaya and Indonesia and the Buddhist country of Siam should all have kept the Hindu epics as part of their popular culture. Hinduism itself has survived chiefly in Bali, where it has been preserved by the relative inaccessibility of the island. The civilization of Bali probably presents a picture of what the whole of Indonesian and Further Indian culture must have been like in classical times, with its mixture of Hinduism and Buddhism. A few Hindus survive in countries predominantly Muslim or Buddhist. At one of the minor courts of Indo-China, Hindu rites are still performed by Brahmin priests, and in Siam the cow-keepers are still Hindus. Indian influence also shows itself in costume, in arts such as batik dyeing and the weaving of shot silk.

Such in broad outline is the story of the cultural empire of Greater India, of which now relatively little remains. If the story were to include all those countries in which Indian religious ideas have played a dominant part, *i.e.*, to which Buddhism has spread, it would be an even more impressive story. The incompleteness of the story is tantalising; we should like to know how and when Indian influences first spread, whether it was the missionary or the trader who was first responsible for this remarkable expansion; how far the penetration was peaceful and how far it was backed by force of arms. The available evidence gives us fragmentary and sometimes contradictory glimpses of the true answers to these questions. Much research yet remains to be done on them.

The events of the last three years have given a renewed interest to India's contacts with South-East Asia. As long as they were colonised by separate groups of Europeans—the English, the French and the Dutch—they developed separate destinies, and contacts were confined to a few traders, and a few scholars who were interested in the cultural links between them. Now, these countries are suffering from a new and Asian imperialism which tries to unite them into

one greater East Asian sphere, some have succumbed others are threatened. But it is clear that this group of countries have certain strategic and economic interest in common, and that these are likely to draw them together in the future. These considerations, severely practical as they are, give added interest to the efforts made to reconstruct the history of their cultural contacts in classical times.

INDIAN AGRICULTURE

The basic importance of agriculture in India is now universally recognized. Seven out of ten persons in India are directly dependent on it for their livelihood, non agricultural villagers, craftsmen and village servants are indirectly dependent on it, and it provides much of the raw materials for India's main manufacturing industries. However, much industrialization progresses in India, agriculture is likely to remain the basis of her economy.

Until quite recently, India was economically at the stage of village self sufficiency, with each village producing what it required within its own borders. It is only within the past century, with the development of rail and road communications that Indian farming has been turned to any extent to the production of crops for the market and that any specialization has taken place. Even now there is a great deal of subsistence farming, and over larger parts of the country it is only the surplus of the crops that is exported after local needs are satisfied.

Indian agriculture still retains many of the characteristics of the self sufficient stage both in its organization and its methods. For most agriculturists it is a life rather than an industry, and their attachment to the soil itself and to the traditions of their ancestors is not easily shaken.

Indian agriculture provides the country with almost the whole of its food supplies, and in good years there is even a small surplus available for export. Some 79 per cent of the total sown area is devoted to food crops. Rice is the chief product, 23 million tons being produced annually in British India*. Other staple cereals are wheat (annual production 10 million tons), millets (6½ million tons), barley (2 million tons), maize (2 million tons). Gram and pulses are also widely grown. The annual output of sugar, one of the most important commercial food crops, is 5½ million tons while large quantities of groundnuts, coconuts, and other oilseeds provide the basis of the vegetable oil industry.

Cotton is the chief fibre crop, with an annual output of 544 000 tons. Jute is second in importance, with an output of 1.6 million tons.

* Figures are for British India only since statistical information from the large number of Indian States is incomplete.

The output of wool, hemp and sisal is small. Other important crops are tobacco (423,000 tons), tea (188,000 tons) and rubber. The latter two are mainly plantation products grown on plantations of several hundred acres.

It will be observed that there are some deficiencies in this catalogue. There is no dairy farming, (except for the great military dairy farms and a few large private concerns catering for large towns and well-to-do customers). There is little vegetable growing, and market gardening is unknown except in the neighbourhood of large towns. Fruit farming is in its infancy.

It is generally recognised that Indian agriculture is in an undeveloped state, that crop yields are low compared with those of other countries, and animal husbandry is relatively neglected. The Indian agriculturist himself is intelligent and hard-working, and in face of the circumstances, and with the limited means at his disposal, he achieves as much as is humanly possible. He is, however, very conservative. The bulk of the peasants are still illiterate and effective progress can only be made when education has spread throughout the villages of India and broken down the conservatism of the peasantry.

Several factors combine to keep Indian agriculture in an undeveloped state. One of the chief difficulties is that the size of the average holding is uneconomic. Population is increasing rapidly while the amount of land available for cultivation has not increased in anything like the same proportion. The average size of holdings in British India is $5\frac{1}{2}$ acres; 75 per cent of them are below 4 acres. Not only are such small holdings insufficient to maintain the cultivator and his family at a reasonable standard of living, but they are too small for the application of modern mechanical methods.

The bulk of the land (some 70 per cent) is cultivated by tenants. Rents are both heavy and inelastic; in many cases more than half the gross produce is handed over to the landlord.

Water is one of the great problems of Indian agriculture. Rainfall is not only scanty over large parts of the country, but the seasonal rains are capricious, so that Indian agriculture has been called "a gamble in rain". Irrigation can increase supplies of water and remove the threat of famine and scarcity resulting from the failure of the monsoon; at present, however, only 23 per cent of the cultivated land is irrigated.

The soil of India has become impoverished by centuries of continuous cropping. Sufficient fertiliser is not applied to restore its fertility year after year; cowdung, nature's most valuable manure, is for the most part burnt as fuel instead of being applied to the fields. Soil erosion (very largely due to the increase of population and the cutting down of forests as men and animals move into the hills) has been on the increase in recent years and is removing huge quantities of the most fertile soil.

Farming methods are for the most part still on the traditional lines which were suitable when there was plenty of land available for a much smaller population, but which gives less than the optimum yield now that intensive cultivation is called for. Rotation of crops is understood and practised extensively, but it could be made more scientific. Where cash crops such as sugarcane and cotton are grown the principle is often neglected, and the soil rapidly becomes exhausted. Care is not taken to use good seed, only 10 per cent of the total cropped area is sown with scientifically selected seeds. Modern machinery, even if the farmers were willing to use it, would be uneconomic on their small holdings and they continue to use the traditional implements.

India has the largest cattle population of any country in the world, the farm animals are the cultivator's most important capital for they draw his plough, work his water wheels and lifts, and carry his goods to market. But in the main they are not of good quality, scientific stock breeding is not understood and they are often underfed, especially in seasons of poor rainfall. (There are, however, a few excellent breeds which are considered some of the finest tropical cattle in the world.)

Another obstacle to progress is the average cultivator's lack of financial resources. Traditionally, the cultivator has turned to the village moneylender for finance, and his interest rates are often so high that the peasant can never hope to repay the principal since it is all he can do to pay the interest. The large proportion of the peasants are born live and die in debt. A system of Government loans to agriculturists has been of some help, while in some places, notably the Punjab, co-operative credit has rescued the cultivator from the moneylender and provide him with credit on reasonable terms. The co-operative movement has not progressed very far, however, largely because of the ignorance and illiteracy of the peasants.

There is, however, great hope of progress for Indian agriculture. A great deal of the spadework for a big progressive drive has already been done, and in many instances most encouraging results have been achieved.

Active steps for the improvement of agriculture began to be taken towards the end of last century when a series of severe famines brought home its importance. Agricultural Departments were set up in the Provinces and agricultural research in both crop production and animal husbandry was undertaken. In 1904, Provincial Co-operative Departments were set up to foster the co-operative credit movement in the villages. Other departments—those of forestry, irrigation, public health education and the veterinary service—have also worked for the welfare of the rural population and the improvement of agriculture. In 1927, the Royal Commission on Indian Agriculture examined every aspect of rural welfare. Its report stimulated the work of the departments dealing with

agriculture. It led also to the establishment of the Imperial Council of Agricultural Research which has since done valuable work.

There is, therefore, a considerable fund of technical knowledge of how to improve Indian agriculture; the problem remains how to pass this knowledge on to the actual cultivator and how to persuade him to take up the new methods. The problem is partly administrative; it has not hitherto proved possible in such a relatively poor country as India to extend the network of Government's beneficent departments of agriculture, education and public health over the whole of India's 700,000 villages. But important beginnings have been made not only by the official machinery of Government but also by private bodies and individuals, to raise the standard of living of villagers and to introduce agricultural improvements. Missionaries, social workers, political workers have devoted themselves to the service of the villagers, and to raise their living standard by promoting better agriculture and cottage industries. By their superior education and wider contacts such workers for rural welfare can help to bridge the gap which so often exists between the villager and the official machinery.

There is every hope that the tendencies towards agricultural improvement, which were already marked before the war, will be accelerated after the war. The Government is contemplating a big scheme of agricultural reconstruction, drafted by its agricultural experts, which aims at a big increase in agriculture output and an improvement in its quality. New land is to be brought under cultivation; irrigation is to be considerably expanded. Production is to be increased by better manuring. Expansion of village forest will provide an alternative fuel to cowdung which can then be used as manure, and plans are already in hand for the erection of large chemical fertiliser plants. There is to be a drive for the use of better seeds and for the improvement of cattle. Research is to be promoted, and its results brought to the farmer through demonstration farms in every area.

At the same time, other post-war schemes under contemplation will benefit the villagers—schemes for forestry, village education and public health, the road development scheme, hydro-electric projects, and finally big plans for industrialization which will draw away surplus population from the over-crowded soil.

There are in addition two reasons arising out of war conditions, why far-reaching schemes, which hardly seemed feasible before the war, now have excellent prospects of success. In the first place, conceptions of finance are rapidly changing; since such great sums are spent on war people are asking why equally bold expenditure cannot be made on the constructive tasks of peace. Secondly, the largest army in Indian history has been recruited during this war. These 2½ million men, most of whom come from the villages, have been made literate in the army and have been trained to handle modern weapons. They are acquiring new technical skills and a new outlook. After

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the war most of them will return to their villages, and the army authorities with great imagination, have already educated them in rural reconstruction. They will bring a new element of education and progressiveness into their villages and they may well provide the leadership for the great drive for agricultural progress which all post war schemes contemplate.

INDIAN ECONOMIC DEVELOPMENT

India is mainly an agricultural country, 90% of her people live in villages and 72% of them are directly engaged in agriculture. But she has the resources and the capacity to develop great modern industries, and already her industrial development is considerable.

Let us first look at her natural resources. She produces enough food for her vast population in normal years, though she may have to import some during years of bad harvest. In good years she actually has an exportable surplus. She also produces raw materials for the cotton, jute, rubber and other industries. Her forest products are timber, resins, drugs and dyes. Vegetable oils are abundant. She has a good store of minerals. Iron is the chief. India is the second largest producer in the British Empire. It is estimated that her reserves are almost as large as those of the United States. She is the world's biggest producer of mica and has important stores of manganese. She has small but useful supplies of gold, copper, silver, tungsten, asbestos, ilmenite, (iron titanate) monazite and bauxite (from which aluminium is extracted). There are probably large reserves of this last metal, but it has not been fully explored. Her chief weaknesses are small supplies of oil, for which she has in the past relied mainly on Burma, and lack of the raw materials for a heavy chemical industry. She has large quantities of coal, though not all of this is of good quality or easily accessible. Nearly all the good coal is situated in one area, in a belt of country stretching westwards from Calcutta for about four hundred miles. It is difficult and expensive to transport this coal to other parts of India, but the best supplies of iron are also found on this coalfield, and here a great industrial area has grown up.

The development of hydro electric power offers the best prospect of cheap power. India has long chains of high mountains on which there is a heavy rainfall, and many rivers and large waterfalls from which electrical power can be obtained. A good beginning has already been made in several places, especially in Bombay, whose numerous factories and electric railway system are run on hydro-electric power.

There are vast reserves of labour in India, but factory labour is on the whole inefficient. This is partly due to the climate, but

more to the low standard of life. None the less, they have great capacities. Given decent wages and conditions of work, Indian labour can compare with labour anywhere in the world. There is in India a great tradition of craftsmanship, though many of her ancient crafts have been ruined by the competition of cheaper machine-made goods; Indians are clever with their hands, and this dexterity can be trained for the purpose of modern industry, as it is already being trained for the purposes of modern warfare.

It may be asked why India has not developed more in the past century and a half. Let us glance at the history of Indian economic development to see what has been achieved. Let us begin with the middle of the nineteenth century, when the opening of railways brought India into close commercial relations with the West. At that time her villages were largely self-supporting economic units, producing within their own borders nearly everything they required, and trade was confined almost entirely to luxuries. The first effect of communications with the West was to make India an exporter of foodstuffs and raw materials and an importer of manufactures. Her village handicrafts such as spinning and weaving, suffered severely in competition with the cheaper machine-made products of the West, though they have never died out entirely. The Government of India recognized that there was a lack of balance about Indian economic life, and tried to foster industries even before the last war. They did much to keep alive the old handicrafts. But this was an age of *laissez-faire*, a policy which had suited Great Britain very well; the Government in England did not alter their policy to suit India, and were against any widespread attempt in India to foster industry by State aid.

At the same time there was some development of modern machine industries within India such as cotton, jute, iron and steel—some by British capitalists and some by Indian capitalists. It is interesting to recall that the first cotton mill was set up by an Indian, and that the great Tata Iron and Steel Works, the sixth largest in the world, was due to the enterprise and vision of an Indian, the late J. N. Tata, and was financed entirely by Indian capital. But in the main Indian industry, until very recently, was held back by lack of available capital and lack of enterprise.

A modern system of banking and capital markets has not yet fully developed in India. This is not because India is too poor to develop such a system. For the past hundred years India has been exporting more goods than she imported, and has been receiving the precious metals in payment of the balance. It was a well-known fact through the previous century that India acted as a "sink" for gold and silver. What happened to all this wealth? Instead of using it to promote industry, it was hoarded either in bullion or as jewelry, or if it was invested at all, it was invested in money-lending or in the purchase of land, neither of which did anything to promote economic development. This hoarding habit is perhaps one of the

chief reasons for the underdevelopment of Indian industry, and an important cause also of the lack of progress in Indian agriculture. Indians on the whole have been slow to take up industrial enterprises (with the exception of the Parsee community, to which the Tata family belong). They have tended rather to take up commercial activities, and of recent years banking and insurance.

But all this is changing, though slowly. Even before the last war, as we have seen, the cotton and iron and steel industries owed much to Indian enterprise. The war itself gave a stimulus to Indian industry. India was cut off from overseas sources of supply, and at the same time there was a demand for her products to supply the Allied Armies in the Middle East. This led to a boom in what industries she possessed.

The period between the two wars has been a period of considerable industrial advance. To begin with, the experience of the war brought home to the Government of Great Britain that the policy of *laissez-faire*, which had suited England quite well in the past century, was quite unsuited to a undeveloped country like India, and a policy of protection for Indian industries was adopted. As part of the policy of preparing India for self government, announced during the Great War, India was given the right to control her own tariff policy. Protective duties were levied on a number of manufactured imports, and behind the tariff walls thus set up industries such as sugar, matches, paper and chemicals have advanced. Banking is at last beginning to develop and Indian capital is being more freely invested. Technical training in India is developing and thousands of Indians have taken technical education in Western countries. The social prejudices against industrial pursuits are weakening and young Indians of good family and education are beginning to enter industry. Scientific and industrial research are being promoted, especially by the endowments of the Tata family.

It is significant that within the last twenty years, the character of Indian foreign trade has been somewhat changed. Exports of foodstuffs and raw-materials have fallen off and so have imports of manufactured goods, particularly cotton goods. This is an indication that Indian economy is becoming more balanced, instead of exporting foodstuffs to pay for her manufactures, she is manufacturing a larger proportion of her requirements and keeping her foodstuffs at home to feed her working population.

The present war has given an additional stimulus to Indian industry. Once more India is cut off from overseas markets, and once more (though on a far larger scale) she is the base of supply for Allied armies. Indian industry is far better prepared to take the strain than in the war of 1914-1918, and war supplies of every kind are being manufactured in large quantities. Indian industries are therefore benefiting by the war and India will emerge from the war with greatly increased productive power.

WARTIME INDUSTRIAL EXPANSION

It is a matter of importance to her neighbours to have a clear idea of how the war is affecting Indian economy, for the developments now taking place in India are bound, once trade channels are cleared of wartime debris, to affect her overseas trade and her relations with her neighbours.

When war broke out, Indian industry at once felt the strain, and as war developed an even bigger strain was thrown upon it. From the first Indian industry had to face the difficulty that old markets and former sources of supply were cut off; new markets had to be found and new industries set up to supply deficiencies. Then came the demands of the war itself. The successive stages of the war placed an ever-growing burden on Indian industry: first the entry of Italy closed the Mediterranean route, and made India a chief supplier not only for her own Army but for Allied armies all over the East and Middle East. Then the attack on Russia made India a supplier both to the Russian armies and to the Allied supporting armies in Iran and Iraq. Finally the Japanese assault made India the bastion of the United Nations in the East.

At the outbreak of war India's chief assets for war production were a flourishing textile industry, a growing steel industry, and a fair potential capacity in the Government ordnance factories and railway workshops. But industrial expansion was checked by two serious "bottlenecks": a shortage of technicians and a shortage of machine-tools. Even the most advanced industries depended for ancillary stores on foreign countries; for instance the cotton mill industry obtained its bobbins from England and Japan. (Now of course they are manufactured in India.)

The Government of India took steps from the first to increase output. A Supply Department was set up to order whatever supplies were possible from within India. Foreign experts, both British and American, were called in to advise on the expansion of industry. To overcome the shortage of technical personnel a scheme of technical training was organised; instructors were brought from England, and selected Indian workers were also sent to England for advanced training there. Machines and machine-tools have been imported from the United Kingdom and the U.S.A., and a beginning has been made with the manufacture of machine-tools in India itself.

What has been the result of all this effort in terms of actual expansion of industries and starting of new ones? There is no doubt that expansion has been enormous. It is estimated that India can now produce 90% of the different items of equipment, stores, etc.,

required by the Army—and according to one survey there are 40 000 items¹ Of many of these items she can meet all her own requirements and of some she has an exportable surplus

India's staple industries have markedly expanded The cotton industry is very largely turned over to war production is supplying the clothing needs of India's armed forces and has an exportable surplus The output of military supplies in one single year was about 100 million garments At the same time the mills still have capacity for civilian needs

The iron and steel industries have also expanded considerably The output of steel before the war was comparatively small about $\frac{1}{2}$ million tons which came almost entirely from the Tata Works Expansion has been difficult because of the lack of trained personnel and the difficulty in setting up additional plant None the less the output has increased almost 100% One remarkable feat is the production of special steels in India Before the War the demand for them was small and they were imported from abroad but as a result of research in the Tata laboratories these special steels can now be made in India from materials mined in the country Notable among these are bullet proof armour plate for armoured vehicles alloy steels for armour piercing bullets and shots a high speed steel for machine tools and a stainless steel for surgical instruments India has the necessary supplies of iron manganese chromite and wolfram and almost unlimited expansion is possible

The manufacture of armaments has greatly increased The Government of India had a number of ordnance factories before the war these have been enlarged and the railway workshops and a considerable number of civilian workshops have been taken over new engineering works have been opened some where there was nothing but jungle before Plant and equipment are arriving from the United Kingdom and the USA to help in the task of expansion As a result a wide range of articles is being made guns of almost every kind ammunition hand grenades and explosives Mathematical instruments parachutes and respirators are being manufactured—as well as commodities which are less obviously armaments such as wireless sets oil cookers and camp kettles

Before the war India imported practically the whole of her medical stores now she manufactures large quantities and has an exportable surplus of certain kinds The development of special steel has made it possible for her to produce surgical instruments she manufactures enough to meet her own Army requirements and according to recent figures has shipped 80 000 to Russia The drug industry has developed 300 items formerly imported are now manufactured at home and some items are exported as far as China and Egypt Surgical dressing bandages cotton wool and lint are all being manufactured on a large scale

The war has witnessed the development of two new industries in India—the aircraft industry and the ship-building industry. The ship-building industry in fact existed on a small scale before the war, when it confined itself to the construction of small river vessels and transit repair work. Now there are no less than 56 firms engaged in ship-building and repairs; hundreds of ships ranging from steel minesweepers and patrol boats to dinghies and wooden barges have been built in recent years and major repairs are now undertaken in India's dockyards. India's aircraft industry began only after the outbreak of war; its activities are as yet confined to assembly and repair, but preparations for the manufacture of complete aircraft are well forward.

To go into full details of India's war production would require a volume, and it is difficult to discuss the matter in the compass of a short article without its becoming a catalogue. We may refer to a few in which there have been striking developments. Glass is an industry which has been stimulated by the war. It has launched on ambitious ventures, and is manufacturing binoculars, prismatic compasses and other optical instruments for the Army, and is experimenting with optical glass manufacture. Boots for the Army are manufactured by the million on mass production lines; they go to Russia as well as supplying the Indian Army. Indian-made bicycles and sewing-machines have made their appearance on the market. Aluminium is a very recent and significant development.

India will emerge from the war with greatly increased productive capacity. Her chief deficiencies, lack of skilled technicians and lack of a machine tool industry, are being remedied under the pressure of war needs. Government's post-war schemes for technical training are intended to remedy the deficiency that still persists in the supply of the higher categories of technicians. Much of the new production, such as guns and shells, is directly for war purposes and is likely to disappear when the war is over. But some of her new industries are likely to be a permanent addition to her industrial potential; take for instance her new special steels in which she has developed a hitherto unrealised capacity.

What of the future? Once the Army demand ceases, what will happen to her new industries? Once trade begins to flow, will the industries established under the protective covering of war, such as the manufacture of bicycles, be able to stand against foreign competition? What of her markets in neighbouring countries?

An answer to these questions depends largely on the political shape of things to come, about which few would be so bold as to prophesy. But they are questions that must be asked, not only in India, but by her neighbours, if we are to plan wisely for post-war reconstruction.

STATE AND INDUSTRY

Government policy in relation to industry in India has developed in marked stages during the British period. They may roughly be described as the period of exploitation, the period of laissez-faire, and the period of industry, in which stage we are at present. We may also note another line of development, down to 1921 Indian economic policy was governed from Great Britain, but since the constitutional changes of that year it has more and more been governed from India itself.

India was renowned for centuries as the home of thriving industries and their products, the silks, chintzes, jewelery, and other luxury articles brought the European trader to India. These industries, it is almost needless to say, were handicrafts and not of the modern type. The British first came to India as traders and their interest was frankly the making of money. These were the days of the East India Company many of whose servants came home with fantastic fortunes. At first the Company tended to foster those industries which yielded products for its import trade, but the pressure of vested interests in England succeeded in prohibiting the import of such products as competed with English industries and thus struck a blow at Indian industries.

But the Company, in trying to protect its trade against piracy and internal disorder, found itself obliged to take a hand in the government of the country, and as its governmental duties increased, so did the sense of responsibility of its officials for the well being of the people who had come under their charge. The spirit of exploitation therefore gradually yielded to a spirit of service, though particular vested interests were long successful in maintaining their pressure on Government for favourable treatment.

It is of course impossible to assign any dates to these stages, since they overlap each other. We may say that the spirit of service to India began to manifest itself among British officials of the East India Company in the latter part of the 18th century, and had become general by the time the Company handed over the government of India to the Crown in 1857. Yet we find the Manchester cotton interests successfully pressing for an excise duty in the Indian market, as late as the end of the 19th century. None the less, the general policy of the British in India during the 19th century was to rule India for the benefit of the governed—a policy which was no doubt beneficial to the British trader at the same time by promoting the general prosperity of the country.

Law and order were established, roads and railways built, education fostered. There was, however, no State encouragement of

industry as we now understand the term; for this was an age of laissez-faire. The principle, which suited England excellently, was not so suitable for India. India has potentialities for industrial development, but it is handicapped by many factors: lack of capital, lack of enterprise, lack of technical skill, and the competition of already well-established foreign industries. In such conditions, where private enterprise is inadequate for the promotion and fostering of industry, the State must take the initiative. But the maximum that the Government of India did before the Great War was to organize technical and industrial education, and to promote industrial research and experiment.

By the beginning of the 20th century, public opinion was pressing for a more forward policy. The views of Indian economists and public men on this matter were shared by many British officials in India, and in 1905 the first clear sign of change occurred with the setting up of an Imperial Department of Industries and Commerce. Departments of Industry were also set up in the Provinces; local industries were given financial assistance, and in one or two cases the Provincial Governments themselves started new industries on an experimental basis. But the Home Government set its face against such activities as infringing the almost sacred principles of laissez-faire, and directed that State money should be spent on the dissemination of industrial and commercial knowledge, leaving all industrial activities to private enterprise.

The events of the Great War gave a rude shock to the laissez-faire theorists. The mutual interdependence of nations broke down. India, her foreign trade hampered, was thrown largely on her own resources, and dangerous weaknesses in her economic structure were revealed. At the same time India became a supply base for Allied armies operating in the Middle East, and this created a further strain on her economic resources. At last it was realised that the industrialisation of India was a desirable objective, and that its promotion should be undertaken by the State. A Commission of Inquiry was appointed in 1916, and its report marks a turning point in Indian industrial policy. It recommended that Departments of Industries should be started in all the Provinces, that scientific and industrial research should be reorganized, technical training improved, and that both technical and financial aid should be given to promising industries.

With the constitutional reforms of 1921 Indians gained a far greater degree of control over the government of their country, particularly in the sphere of Provincial Government. Industry was made a Provincial subject and thus came directly under Indian control. At the same time the British Government accepted the principle of fiscal autonomy for India, so that the tariff, that powerful weapon for fostering industries, also came under Indian control. All the signs pointed to a big change in policy and far more extensive State encouragement of industry. Unfortunately, the end of the

war brought also economic depression and financial stringency, and the progressive policies suggested by the Indian Industrial Commission could not be fully carried out.

None the less, some progress was made. The Provincial Departments of Industries, in spite of lack of personnel and funds, did good work. They promoted technical training and industrial research. They gave financial and technical assistance to existing industries, established new industries, improved marketing, and co-operated with other departments in measures for the improvement of the economic condition of the masses. Most of the work, however, has been in connection with the preservation and improvement of India's traditional handcraft industries such as weaving and pottery. These have been fostered by financial grants, by research on improved methods, and by extending their markets through exhibitions and industrial museums. Attention was also given to modern industries, there has been research on the chemical industry, the manufacture of aluminium and of chrome leather. It is difficult to say how much all this activity has contributed to the advancement of modern industry, since the Departments were always hampered by lack of funds. There is no doubt however, that without their interest and support the handcraft industries would be in a far more precarious position than they are now, and in many cases it is official encouragement that has kept them alive.

Tariff policy has been of more definite effect in promoting the growth of modern industry. Under the policy of fiscal autonomy it was laid down that the industries to be given protection should be those for which India possesses natural advantages, and which should eventually give a profit without Government aid, but which are unlikely to develop without initial protection. A policy of discriminating protection was adopted, i.e., goods which promote industrial development such as raw materials and machinery were to be admitted free of duty, while special duties were to be levied on those imports which competed with growing Indian industries which it was considered desirable to protect. A Tariff Board was appointed to investigate the claims of particular industries for protection.

The Tariff Board examined the claims of a large number of industries, but it has not invariably recommended protection. It bears the interests of the consumers in mind as well as those of industry. In some cases it recommended high protection, as in the case of the steel industry, in the case of the chemical industry it proposed that the grant of protection should be made conditional on the reorganisation of the industry on more efficient lines. (As this was not done, the protection was withdrawn after two years.) Industries such as paper, matches, sugar have flourished under protection. The most striking case is that of sugar. Although India grows large quantities of sugar cane, the manufacturing industry had not been able to compete with the well-organized Java industry; but in 1932 an import duty was put on sugar, and within two years factory

output increased fourfold, and by 1937 India was threatened with over-production of sugar.

Governmental policies have on the whole been against State ownership and management of industrial enterprises, but have taken the shape of encouraging private enterprise. There are, however, some exceptions—for instance railways, which are mainly owned by the State, and managed partly by the State and partly by Companies to whom the State leases the railways. The Government of India also owns and manages its own ordnance factories.

The present war has affected India's industries greatly. The immediate effect of war on policy has been to remove the financial brake on State aid to industry; under war finance bold schemes are being carried out which would have been impossible under the cautious finance of peace. Big schemes of technical training have been launched. Industrial research is being promoted by Government and has already yielded valuable aid to Indian industry. Lease-lend material sent to India includes vital machinery and machine tools. All this, combined with increased demand for India's industrial products for war purposes, has brought about a vast increase in Indian industrial output.

War conditions have led, as elsewhere, to the extension of State control in every department of economic life. The supply of raw materials is controlled by a system of priorities, as are exports, imports and internal transport facilities. The prices of many consumers' goods are controlled, and there is detailed control of both price and distribution of food and cloth. Much of this control is effected by co-operation between representatives of the industry concerned and the State. What is emerging under the stress of war is therefore neither private enterprise nor full State enterprise, but a system of joint control by the State and private enterprise. This compromise will inevitably continue after the war. The Government has already committed itself to an active and forward industrial policy, the essence of which is that the State takes on itself the responsibility for the promotion of industry, while retaining—in all but a few industries—private enterprise controlled and assisted by the State as the form of economic organization.

INDUSTRIAL LABOUR IN INDIA

Although India is a predominantly agricultural country, we must not forget that her industries are developing and that she has a large and growing industrial population

It has been estimated that there are some 30,000,000 industrial workers in India. A very great number of these are cottage workers, working either in their own homes or in small workshops. There are some four to five million urban workers, including nearly two million workers in factories big enough to come within the scope of the Factory Acts (*i.e.*, concerns using power and employing not less than 20 persons), and a very large number of workers in unregulated workshops.

Any picture of the conditions of urban labour in India must necessarily be somewhat depressing. India is now experiencing her industrial revolution, and we find her conditions powerfully reminiscent of those of England a hundred years ago—or indeed of those of any country in the early stages of industrialization. Here are the same exploitation and misery, the same first attempts at improvement meeting with the same difficulties. In England, as elsewhere, the lot of the workers was improved by the intervention of the State, stimulated by an awakening of public opinion, and by the growth of Trade Unions, in time, a standard of industrial morality developed, recognized by employers and workers alike, which together with legislation and Trade Union action safeguards the standard of living of the worker. It is significant to watch the same forces at work in India, and they give one hope for the future of the Indian working classes.

The town worker is at heart a villager, with his roots in the village from which he comes, and to which he returns in times of unemployment or sickness. Only recently has a true urban proletariat begun to grow up. The average town worker is in fact a migrant. He is frequently uneducated and very poor, for it is in the hope of bettering his condition that he had left his village. But the villager who is drawn to the town by the lure of higher wages does not use his higher wages to improve his life in the city. In the village, he lived in a one-room hut and spent most of his day and night in the open. As an industrial worker, he lives in a one-room tenement and spends the day in the confines of the factory. His tenement looks very little different from the hut in which he lived in his village. It contains hardly any furniture—a cot, a few cooking utensils, some cheap clothing, and a few odds and ends comprise the entire stock of his belongings. But where humanity is packed together as it is in the working-class districts of Indian industrial towns, new social patterns and new problems, different from those of the village, inevitably arise.

The labour problem in India, therefore, is not merely to create healthy conditions of life, to raise the wages and curtail hours of work, but also to harmonise the outlook of the worker with his new environment and to persuade him to raise his standard of life. The growth of trade unions, the efforts of employers to improve the lot of the workers, and lastly the intervention of the State—these are some of the relieving features of the picture of industrial labour in India today.

Social workers have led the way both in active help and in stirring the public conscience. Much devoted work is going on in the slums, in social service centres, schools, maternity and child welfare centres and creches. Social workers assist in Trade Union work, which the factory workers themselves are too poor and illiterate to carry on unaided. They have been champions of the poor in the legislatures, all of which now have special Labour representation.

Enlightened employers have been another help to the workers, and their successful welfare schemes have refuted the theory that industry cannot afford to treat the workers decently. Almost all the larger labour-employing organizations now have welfare schemes, and in many cases they are under the charge of special welfare and labour officers. Some large employers provide canteens, creches and nursery schools, recreation centres and reading rooms for their employees. Some have built workers' colonies and have shown decent housing to be economic. Conspicuous among these is Jamshedpur, the town of the great Tata Iron and Steel Works, where each house has its own garden, and where there are schools, workers' clubs and recreation grounds. Some Municipalities have now started their own housing schemes.

Trade Unions have been growing, especially in the last quarter of a century, but even now their membership is only about half a million. The majority of the members being poor and uneducated, outsiders (lawyers, journalists and social workers) have had to lead the movement. This has had drawbacks : the employers have naturally regarded such outside intervention with distrust, and there has been a tendency for the more politically-minded of the Trade Union leaders to utilise the organizations for political purposes. But in spite of this they have done much praiseworthy service for the industrial poor.

The earliest recorded workers' movement was in Bombay in 1890, when the cotton mill operatives won a weekly holiday ; but this was an isolated effort. Other attempts at trade union action were just as isolated, and permanent unions were not formed till 1919. In 1921 an All-India Trade Union Congress was formed, and although it was composed almost entirely of educated outsiders, and has from time to time been distracted by purely political issues, it has done good work. The Trade Unions have on the whole put economic before political objectives, and they have met with a certain success in protecting wage rates, in fighting cases of victimization

and claiming compensation Above all the unsophisticated ignorant and illiterate worker has been roused and made conscious of his rights and privileges Indian workers indeed have shown a remarkable capacity for combined action and tenacity of purpose in industrial disputes and at a crisis many non Union workers will be found loyally supporting their Union fellow workers Their movement is free from those religious divisions which so often undermine the organizations of their social betters As the workers become better educated the Trade Unions should become very strong

The most effective help to the industrial poor has hitherto come from the Government which has built up a body of labour legislation and the administrative machinery to look after their interests The first Factory Code was passed in 1881 and it has often been improved since The entry of India in 1919 into the International labour Organisation (where she has a permanent seat on the Governing Body) gave a great stimulus to labour legislation In 1930 a Royal Commission was sent out from England to investigate Indian labour conditions it produced a remarkable report and made several suggestions which have formed the basis for further advances in industrial legislation The Factory Code deals with hours conditions of work especially ventilation and fencing of machinery workmen's compensation safety measures in mines control of women's and children's work creches in factories employing large numbers of women Measures have also been taken to deal with the debt problem of the very poor The administration of the Factory Code is in the hands of the Provincial Governments who have built up a body of factory inspectors There are not yet enough of them and evasions of the law still take place but the Factory Code sets a standard which all decent employers follow and which is slowly being enforced on unscrupulous ones

The second world war has brought new opportunities and a new outlook for industrial labour in India Industry has expanded and with it the numbers of industrial labourers The need to increase the efficiency of the Indian worker became imperative Under the stress the Government has been impelled to deal in increasing degree with industrial problems and problems of labour welfare

Two new principles have been introduced into the Labour Code of the Government of India Strikes and lock-outs without notice have been declared illegal and employers and employees are compelled to submit their disputes to arbitration The Government has also taken upon itself the right to prescribe fair wages and conditions of service The Government of India have established a Labour Welfare Organisation at New Delhi and through this agency all information regarding labour is collected and used for initiating policy and legislation A former well known labour leader Mr R S Nimbkar is the Central Government's Labour Welfare Adviser and under him are officers posted in various provinces where they maintain contact with labour

A landmark in Labour history is the establishment of tripartite machinery, comprising representatives of Government, the employers and the workers, for considering matters relating to labour welfare and industrial relations and disputes. The Royal Commission on Labour had recommended that an Industrial Council should be established to provide opportunities of contact between the principal elements in India's industrial life ; and the tripartite machinery now set up goes far to fulfil this recommendation. The first Tripartite Conference met in August 1942, and set up a Standing Labour Committee which has met a number of times to deal with actual problems. These have included such matters as : safety of workers during air raids, dearness allowances, the provision of "cost price" grain shops for industrial workers, problems of industrial fatigue and the appointment of Labour Officers in industrial undertakings. The tripartite method has worked with considerable success, and although it was introduced as a wartime measures it has undoubtedly come to stay in peace.

Among other wartime achievements are the schemes launched by the Government to provide India with skilled technicians. Two schemes, complementary in their aims, have been working. One is known as the " Bevin Boys " Scheme, after Mr. Ernest Bevin, the British Minister of Labour, who was responsible for offering young Indians from the working classes opportunities for training in England. Some hundreds of technicians have been sent to England under this scheme. They return to India as skilled technicians, and statistics show that those who have returned are earning on the average 227% more than when they went to England. But even more important is the fact that an essential part of their training in England is a study of British trade unionism and industrial organization. It is hoped that from among these educated and travelled young workers the future labour leaders of India will rise.

The other scheme is the Technical Training Scheme which provides opportunities of training in Indian workshops to young Indians in a number of trades. The scheme was launched primarily with a view to meeting the urgent demand for skilled workers both in industry and in the technical branches of the armed forces ; and it has provided nearly 80,000 technicians for Indian industry within the course of two years.

These schemes should go far to remove one of the major hindrances to industrial advance in India, the lack of skilled technicians ; while at the same time they should raise the standard of education and ultimately the standard of living of the Indian working classes.

INDIA'S POPULATION PROBLEMS

It has been estimated that at the end of the 17th century (the first time that the administration was sufficiently organized to allow of any computation) the population of India was about 100 millions and that it remained more or less stationary for two centuries but grew rapidly in the 19th century. The first Census was taken in 1872 when the population was 206 millions. It has grown steadily with every decade: it was 350 millions in 1931 and 389 millions in 1941.

It is true that the figures of different decades are not strictly comparable. In the first place the area has changed: fresh districts have been added since 1872 and on the other hand Burma with its population of 15 millions was separated from India in 1935. Secondly methods of enumeration get progressively more accurate with each Census: probably the population was greater in 1872 but many people escaped enumeration. None the less the figures show a rapid rate of growth particularly in the last decade.

India contains nearly a fifth of the world's population: the only country with a bigger population is China with about 450 millions. India also contains some of the most densely populated areas in the world: comparable with the densely populated areas of China, Java and Japan. Some rural areas in the rice growing districts have a density of over 1 200 to the square mile: in such areas the standard of living in spite of the remarkable fertility of the soil is extremely low.

India's population is large, growing rapidly, and the bulk of it is densely packed into the most fertile agricultural areas. At the same time the standard of living is very low: food supplies are barely enough to go round and it is known that a considerable proportion of the population is suffering from under nourishment. The question arises whether India is not already over populated and has not more people than she can adequately maintain. It is a serious problem: what will happen if the present rate of increase of population goes on unchecked?

Let us go more fully into the factors that govern the growth of population. We cannot do better than analyse them along the lines laid down by the first writer on Population, Malthus, an Englishman who wrote on the subject in 1798. He argued that as population tended to increase in geometric ratio while the means of subsistence tended to increase only in arithmetic ratio, population tended always to outrun the means of subsistence until the standard of living was brought so low that the increase of population was checked by poverty, disease and famine. These checks together with war he

described as the "positive checks" on population growth; he gave the name of "preventive checks" to celibacy, late marriages and deliberate restriction of the number of offspring. As Malthus had little hope of the preventive checks proving very effective in stemming the "devastating torrent of babies", he foresaw a gloomy future for the world in which all economic progress would sooner or later be wiped out by the increase in the number of mouths to be fed.

In the Western world Malthus' gloomy prophecies have been belied. The opening of vast new countries and the strides made in industry have increased the available means of subsistence far beyond the increase in population; at the same time the increase in population has been reduced by those preventive checks which he feared would be ineffective—late marriages and restriction of births. But the theory is still applicable to Asiatic countries.

In India the positive checks on the birth-rate are operative. Preventive checks are hardly operative at all. There is a tendency to a very high birth-rate which only falls off after some catastrophe such as a great famine or epidemic. Population increases are related to variations in the death-rate rather than birth-rate.

The tendency to a very high birth-rate is mainly the outcome of the social institutions in India. Religious injunctions encourage marriage and large families, which are considered a blessing. Marriage is practically universal and early marriages are the rule; women tend to begin childbearing at an early age and to have a large number of children. The joint family system also leads to the absence of restraint. A young man does not wait to be married until he can set up a home of his own, but continues to live with his parents after marriage. He does not therefore bear the direct financial responsibility for his children. This, allied to early marriages, is one of the major factors leading to large families.

The prevailing poverty is itself a cause of the high birth-rate. Since the poor are already so poor, they are indifferent to the number of their children—one more or less will make little difference. This tendency of very poor people to have very large families is by no means confined to India but is found in all countries. Poverty, low standards, high birth-rates, are connected in a vicious circle from which effective escape has yet to be found.

In the past, the increase in population has been checked mainly by famine and disease. From time immemorial great famines have periodically swept away large numbers of the people. In the famine of 1638, we are told, one-third of the people perished. Epidemics have from time to time ravaged the land. In 1918-1919, for example, some 12 to 14 million people perished from influenza. Since more or less accurate statistics have been taken, the effects of famine and disease have been very clearly marked in them; the decades in which there were relatively few such calamities have been also the decades in which the growth of population has been most marked. The

increase of population has been to some extent checked by the high rate of infant mortality (20% in the first year after birth) and of maternal mortality

Within recent years these positive checks have been operating less and less. The century of internal peace which India has enjoyed has removed entirely the positive check of war. The British Government has built up an elaborate administrative machinery for dealing with famines, while improved communications have made it possible to rush food to famine areas. Except for the Bengal famine of 1943 which was due to conditions created by the War, no famine in India since 1898 has resulted in widespread deaths from starvation. Improved health services are beginning to reduce the deaths from epidemics and also the high rates of infant mortality and maternal mortality. But since at the same time no force has been at work to reduce the very high birth rate, the result has been a rapid growth in the population, an increase in the rate of its growth and the emergence of a serious population problem.

The problem, to put it crudely, is one of relating the size of the population to the national output so as to secure a decent standard of life. Where as in India the population is so large as to depress standards below what is needed for a decent way of living, the problem must be solved in either or both of two ways: increased production or decreased births.

What prospects are there in India of increased production? There is no doubt that India has an immense unused potential productive capacity. The output of food could be greatly increased by the extension of cultivation and the improvement of methods. But agricultural improvement is a slow process. Since the beginning of the 20th century the increase in the output of agricultural produce has roughly kept pace with the increase in the population, but in the last two decades population has increased so rapidly that it threatens to outstrip the food supply.

Industrialization is often advocated as a panacea for all India's economic ills. While it is essential for the raising of the standard of life of the masses, it cannot provide a complete solution of the population problem. During the 20th century there has been considerable industrial expansion. But in terms of population the result has been to increase industrial employment from $1\frac{1}{2}$ millions in 1901 to 4 millions in 1941, a mere fraction of the total increase in population during that period. Industrialization will have to take place at a greatly accelerated rate to contribute effectively to the solution of the population problem.

Is there any prospect that India will adopt deliberate prudential checks to restrict the birth rate? As far as the bulk of the population is concerned, there is no prudential restriction of births, but among the educated and urban classes there are certain signs that a rising standard of life is having its effect on the birth rate. The age of

marriage is being postponed. Child marriage has been made illegal in British India and some of the Indian States. Another factor is the tendency for young people in up-to-date circles to set up their own homes separate from the joint family—a custom which is only possible if the man is earning adequately, and which involves postponement of the age of marriage. But these tendencies affect only the minority.

There is a great controversy raging in India about contraception, which in the West has contributed to the decline of the birth-rate. There is no doubt that it is fairly widely practised among the urban fashionable classes. But the bulk of religious sentiment is strongly against artificial methods of preventing birth. Hindu, Muslim and Christian religious leaders join hands in this, and their voices carry great weight. Mr. Gandhi has set his face against contraception, and in such matters his opinion is respected not only by his followers, but by many among his political opponents. A recent proposal in the Bombay Municipal Council to set up a certain number of birth control clinics has evoked a storm of controversy. The All-India Women's Conference, representative of the middle-class Indian woman, is for it; orthodox Hindus and the Christian Churches are against it.

There is little prospect of contraceptive methods having any practical effect on the population for a very long time. They may reduce the size of families among the upper and middle urban classes; but they are likely to leave the bulk of the population, which lives in the villages and is poor and ignorant, untouched.

There is no easy or ready-made solution for India's population problem. The question can only be tackled effectively by an Indian Government; for it affects at one and the same time the intimate personal lives and the broad social relations of a people, and is connected with their religious outlook and social customs.

The problem constitutes a great challenge to Indian leadership, both political and industrial, in the years to come. The view is widely held in India that her problem is not so much one of overpopulation as of underproduction: that her resources can and must be developed so as to support a growing population on a higher standard of life.

THE INDIAN RAILWAY SYSTEM

Railways are the main arteries of transport in India. Indian rivers except for the Ganges and the Brahmaputra are not suitable for navigation most of them flood in the rainy season and become mere trickles in the dry so that they are negotiable only by small boats and only at certain seasons. Roads have been growing in importance with the development of motor traffic. There are some 60 000 miles of first class roads usable throughout the year the second and third class roads (unmetalled) are often impassable during the rainy season. But India is a country of vast distances and most of the traffic consists of cheap and bulky articles so that what is needed is cheap haulage which can better be provided by the railways than the roads. Communications in India therefore refer chiefly to rail transport. The roads are useful mainly as feeders to the railways especially for areas within a distance of about 50 miles from the railways.

The opening up of the Indian interior and its products to world trade has depended on the development of railways which has gone on steadily since the middle of the nineteenth century. The first lines were begun in 1845 they were built experimentally and consisted of short lines running inland from the three great towns of Calcutta Bombay and Madras. Railway building on a large scale dates from 1853 when a great scheme for linking up the main towns with each other by trunk lines and the interior with the principal ports was sanctioned. By the end of the nineteenth century the main lines connecting the big towns were all completed. Developments in the present century have been in the direction of building branch lines and chord lines to shorten distances. One expensive item of railway construction has been the building of a system of strategic lines in the barren and sparsely populated North West Frontier region this was started in the 70's of the last century when there was trouble with Afghanistan and fear of a Russian invasion and completed by the construction of the Khyber Railway in 1925. The passes of the North West have for thousands of years been the route chosen by invaders of India and military policy has been based on it. There is no such strategic system in the North East until the last few years invasion has never threatened from that direction in all India's long history.

There are now 41 000 miles of railway in India employing a staff of 826 000. In 1942-43 according to the most recent report of the Railway Board the railways carried 623 000 000 passengers and 95 000 000 tons of freight. The standard gauge of Indian railways is 5 feet 6 inches the broadest in the world shared only by a single country (Spain). The Russian gauge is 5 feet. Most of the big main

lines, and many branch lines, enjoy this spaciousness. There is however a subsidiary network of metre gauge lines, both in the north and the south, and there are a few light railways of 2 feet 6 inch gauge in hill-tracts on the frontier. Electrification is making progress; the suburban services of the great city of Bombay have been electrified, and part of the Great Indian Peninsular Railway from Bombay to Poona and Igatpuri, a stretch of 119 miles to the former, and 80 to the latter, has also been electrified.

The history of the financing and control of Indian railways is a complicated one, but so many of present controversies are connected with it that a brief survey may be useful.

In the first period of railway construction, from 1849 to 1870, the Government had no spare funds for railway building. The construction of railways was therefore left to private companies with borrowed funds on which the Government of India guaranteed the interest. This proved very expensive. The guarantee system encouraged extravagance in construction, and since at first the companies were working at a loss, the Government had to find large sums to make up the guaranteed interest. The Government next tried to construct and operate railways as a State concern, but were unable to raise sufficient capital. In 1879 therefore they returned to the guarantee system, with a lower rate of interest and with closer Government supervision of construction and running. At the same time the State acquired an option of purchase at the end of the period of the contracts with the Companies, which were usually given for 25 years. The State has invariably exercised this option, so that the system is gradually passing into the possession of the State. The Companies are paid in terminable annuities, so that eventually the railways will be the outright property of the State. Already the Government owns some 80% of the railway system.

The system of management is complicated. In some cases the State has taken over the management of the railways with their ownership; in others the railways were re-leased to the Companies who managed them on behalf of the State. In that case the profits are shared between the State and the Companies in certain agreed proportions. The whole system is under the general control of an official body, the Railway Board. The relative merits of State and Company management are an endless theme of controversy, so much so that we may conclude that the difference is not marked. The general tendency is, however, towards complete nationalisation.

Indian railways, whether State or Company managed, have for years maintained a high standard of service. There are three main classes, First, Second and Third, with an Intermediate Class between Second and Third. First class travel is excellent; in the new air-conditioned coaches it is luxurious. Second and Intermediate Class travels are comfortable; there are upholstered benches which form beds for night travel. Third class travel, in long compartments

with rows of wooden benches, alone is rough, but it is incredibly cheap. Every effort is made to provide amenities at railway stations for the upper classes, such as waiting rooms and refreshment rooms. An important consideration in a hot country where diseases spread easily is cleanliness of refreshments, the railway authorities provide pure drinking water at all stations, and they allow the sale of food only by licensed vendors.

Visitors to India would not now find the railway system at its best, for it has been profoundly affected in many ways by the war. Traffic has increased beyond all expectations. As one of the great supply bases of the Allied Armies, India has been sending huge quantities of military supplies to the ports for shipment to the Middle East and Russia, and eastwards for the Burma Front. Shortage of shipping cut down the coastal trade, and goods formerly sent round the coast by sea have to be sent by rail. For instance, coal which used to be sent by sea from the East Indian coalfields to Bombay and Karachi is now sent overland, and the amount of coal carried by rail to these places is from four to six times as large as before the war. Foodstuffs have to be moved from provinces which have an exportable surplus to those areas which are in deficit. Rice in particular has to be hauled long distances to replace the 2½ million tons which were imported before Japanese aggression cut off overseas supplies. The high price of petrol, and later its shortage, have diverted much traffic from road to rail.

The railways have also had to carry a heavy military traffic. In 1941, there was an added burden of a large number of prisoners of war, in that year, some 2,000 special troop trains were run for the Army and its prisoners. The number of special troop trains has now risen to over 400 a month, and in addition, numbers of small parties of troops are carried by ordinary trains.

At the beginning of the war, when the need for munitions took precedence over almost everything else, three large railway workshops were handed over for munitions production, and the spare capacity of other workshops has been utilized to the full. Shells, bayonets, motor lorry bodies, tent poles, are some of the very varied materials now being turned out. The railway workshops have also contributed to the widening of the two "bottlenecks" of Indian industrialization—shortage of machine tools and shortage of technicians. Railway workshops now produce most of the tools necessary both for munitions and railway work, which formerly were imported. They have undertaken the training of skilled labour, not only for their own needs but for the armed forces and other war factories. Instructors have been brought out from England, and a number of qualified workshop employees have been sent to England under the 'Bevin Scheme' for further training. As many as 100,000 technical trainees have now been recruited in the railway workshops.

Large quantities of railway material were sent abroad to supply India's far flung defence lines in the Middle East. Some 200 locomo-

tives and 10,000 wagons were sent overseas. Some unremunerative lines were dismantled and their railway tracks, signalling apparatus and other equipment sent overseas. These lines played a vital part in supplying the armies that chased Rommel out of Africa.

All this cutting down of reserve stocks and the diversion of production and repair equipment have however meant that repairs and replacements have been brought down to the lowest possible level consistent with safety, and the Indian railway system has been running on very narrow margins. As long as India was relatively remote from actual theatres of war the cutting down of railway equipment was not a very serious matter—the Middle East front had first claim on India's resources. But with the approach of the Japanese to India's frontiers she became a major military base as well as a supply base, and it became vital to increase the capacity of her communications. At the same time a series of calamities increased the difficulties of the railways. There have been unusually heavy floods and cyclones which interrupted traffic on important lines, sometimes for months. In August and September 1942 a sabotage movement aimed at communications struck heavily at the railways. Prompt action by the Government, and the magnificent loyalty of the railwaymen, prevented the sabotage movement from seriously dislocating traffic.

The railways have adjusted themselves to these difficulties in a number of ways. Passenger traffic has been cut down to two-thirds of its pre-war volume. An elaborate system of priorities has been set up, so that the movement of essential goods is given preference. Wherever possible, railways have handed over traffic to the roads and waterways. Shortage of locomotives is the most serious check on the expansion of transport ; but arrangements have been made for locomotives to be imported from Great Britain, Canada and the U.S.A., and these have been arriving from the middle of 1943. Wagons are also beginning to arrive from abroad, and the manufacture of wagons in India is now being taken in hand. Workshop capacity is being taken back from munitions production to speed up repairs. Plans are being pushed for the setting up of a locomotive construction shop in India, though work cannot begin till the necessary plant is procured from abroad.

In spite of all the difficulties created by abnormal war conditions, the railways have never failed in their main tasks. These were well summarised in a recent speech by the War Transport Member of the Viceroy's Executive Council, Sir Edward Benthall. "The demands of the Army," he said, "have been met. Every important industry has been kept in operation. The increased production of munitions has been maintained and the essential civil requirements of the country have been met, though at times with great difficulty."

2 pies 3 (2½d.) to annas 10 pies 6 (1 sh.) for incomes above Rs. 150,000 (£11,250). Although it causes a great deal of grumbling, rates are low compared with other countries at war. For instance, an income of Rs. 5,000 (£375) pays Rs. 273—just over 5% ; out of which Rs. 25 (about £2) is funded for the assessee's benefit ; an income of Rs. 50,000 (£3,750) pays in income-tax and super-tax combined Rs. 13,841—28%. Rates have been raised recently, but not greatly ; but there is no change in the scale of allowances made for life insurance premia and subscriptions to provident funds up to a sixth of the assessee's income.

Before the present war India had a public debt of £935,000,000 partly raised in India and partly in Great Britain. Of this the sterling debt (*i.e.*, money owed to Great Britain) was £352,000,000 on which some £13,000,000 was paid annually in interest. This payment was one of the favourite themes of critics of the Government ; it was described as a " drain " on India, the " tribute " India was forced to pay. This was an inaccurate description. Two-thirds of the debt was used for the productive purposes of railway construction and irrigation, the two constructive activities of the 19th century that have lifted the curse of famine from India and contributed to her prosperity. India would have been distinctly poorer without these borrowings. In terms of hard cash the interest earned on these investments more than covers the debt charges on the entire public debt.

India pays no tribute to Great Britain. On the contrary, Great Britain has made considerable contributions to India's defence.

That Great Britain should contribute to the cost of Indian defence was an accepted principle even before the present war. It is obvious that in a major war India is in a key position from the strategical point of view, and she must necessarily play a large part in the defence of the British Commonwealth. It is impossible to determine what part of her defence expenditure is necessary for strictly Indian defence, and what is necessary for the wider defence of the British Commonwealth. India, moreover, is a relatively poor country which cannot by herself afford the heavy cost of modern defence measures ; hence the decision of the British Government in 1939 to make contributions to Indian defence. Thus when the modernization of the Indian Army was decided on, on the recommendation of the Chatfield Committee immediately before the outbreak of the war, Great Britain made a contribution of £34,000,000 to the cost of the scheme. Three-quarters of this was an outright gift ; and the remainder a loan. Moreover the British Government undertook to make an annual contribution of £2,000,000 to the cost of India's defence.

With the outbreak of the war the allocation of expenditure was again reviewed, and a financial settlement was arranged in November 1939 between the Government of India and the Government of Great Britain—or His Majesty's Government, to give it the technically correct name. Under the settlement India was to pay (a) her pre-war budget for defence, amounting to £27,000,000, (b) a sum in adjustment of the normal budget for rising prices, (c) the cost of war measures

undertaken by India solely in her own interests, (d) a contribution towards the additional cost of her external defence (This has amounted to £750,000) His Majesty's Government is to pay for the remainder of all general defence and supply expenditure incurred in India

This settlement was concluded when no major expansion in the Indian Forces or in the supply activities was in sight, but almost immediately afterwards a huge expansion of the land forces was embarked on, and the cost was divided as follows

(a) India would pay for the raising, training and equipping of all land forces raised in India and for their maintenance as long as they stayed in the country. When they left for overseas the cost to India would be recovered from His Majesty's Government, who would assume all further liability for them

(b) All imported equipment and stores for such expansion measures (with some exceptions) would be provided free by His Majesty's Government

The expenditure incurred by Great Britain on defence and supplies in India amounts to hundreds of millions of pounds a year. Strictly speaking, Great Britain does not pay all this money in India, but India makes payment in rupees against sterling credits placed to the account of the Government of India in London

This brings us to the most significant effect of the war on India's position, namely her transformation from a debtor to a creditor country. Before the war India was a debtor country, sending considerable sums to England every year as interest on her debts. But now England is in India's debt. India has become a great supply base for munitions and all kinds of war stores, and she has been exporting goods both to Great Britain and on Great Britain's account to all theatres of war. Great Britain obviously cannot pay for these goods at the moment by sending either goods or gold to India; she can only pay by placing sterling to India's credit. To this are added all the payments which Great Britain has undertaken to make under the various financial settlements so that by now India has accumulated large balances of sterling credits.

What should be done with the sterling balances is a perpetual subject of discussion in India. Over £300,000,000 have already been utilised to offset India's debts to Great Britain by the process of repatriation of sterling debts. There are still considerable balances available. Many post war reconstruction schemes propose that these balances should be used to pay for capital goods which the United Kingdom will be in a position to supply for India's industrial expansion after the war.

THE LAND REVENUE SYSTEM

The system of land tenure in India is of immeasurably ancient origin. India has been governed for the past thousand years by wave after wave of foreign rulers, but all of them accepted the social and economic structure of the country as they found it, making only slight modifications in it in the course of time. We have to go back to the earliest times to understand present institutions.

Until recently the idea of ownership of land did not exist. What existed was the right of holding and cultivation by the peasant, and a right to a share of the produce by the overlord, (whoever he might be or however he got his title) in return for protection. In the earliest records we find hints that the land of a village was held and cultivated by a brotherhood of villagers, and that occupancy was by custom hereditary. The principle was also laid down in the old law books that the King was entitled to a one-sixth share of the harvest. This idea of the ruler's share runs right through Indian history, and lies at the bottom of the present system of land revenue. But seldom were the rulers so modest as to confine their share to one-sixth; there are many references to rulers taking one-third or even one-half of the gross produce.

Another feature of the ancient system, which has also survived many vicissitudes, is the assignment of revenue, sometimes to officials as a reward for services, sometimes as endowments to temples or for charitable purposes. To this day many Hindu temples draw their revenue from lands assigned to them centuries ago by forgotten Hindu kings.

The Muslim invaders did not alter this system, but the great Akbar tried to improve it and to make it more just. He divided the revenue business of the State from the general administration, and appointed a special Revenue Minister with his own staff of collectors. The bulk of the revenue was assigned to various officials, but some revenue was reserved for the imperial Treasury; so that the Revenue Minister had two tasks, that of allocating assignments and that of managing the revenue areas.

With regard to the actual method of collection, the system that Akbar developed was so sound that it has lasted to the present day with few changes. Each area was charged with a sum (varying with the crop) calculated to represent the average value of one-third of the produce; then, when the crop came up, measuring parties went out to measure the area of each crop sown by each peasant, the sums due were then calculated, and they were collected at harvest. Allowances were made for possible failure of the crops, on which part or the whole of the revenue was remitted.

In the complicated business of assessing and collecting the revenue much reliance was placed on local village functionaries, the headman and the village accountant. These were not strictly Government officials, but held their position by hereditary right. The Moghuls inherited this institution from the old Hindu land system, and the British in turn found it in being and kept it, and it is an essential part of the land revenue machinery to the present day.

Under the various Muslim dynasties, many of the Hindu rulers continued to hold positions as subordinate chiefs, paying tribute to their overlords, they, of course, continued to collect revenue from the villages on their domains in the traditional ways. There was therefore no uniformity in the system over the Empire. After Akbar's death the system became still more complicated and at the same time more oppressive. The assessment was gradually raised from one-third to one half of the gross produce. The revenue was often farmed out to officials, who took the first opportunity to shake free of the Imperial government at Delhi and set up as independent chieftains, keeping the whole revenue for themselves.

The British first acquired a substantial footing in India when the East India Company was assigned the revenues of Bengal by the Emperor at Delhi in 1765. They were faced with a very confused state of affairs and matters were made still worse by the fact that they then understood little of Indian institutions. They thought in terms of their own land system of which the main feature was the relationship between a landlord, outright owner of his land and paying taxes on it, and tenant, who rented the land and actually farmed it. With characteristic zeal for legality, they began to make "settlements", i.e., to ascertain the owners of the land and to assess the revenue on them. In Bengal they found a class approximating the English landowner lordling it over the cultivators and exacting payments from them, but actually these "zamindars", as they were known, were not the owners of the land at all, but officials or revenue farmers appointed by the Moghuls to collect the revenue, who did more or less what they pleased in exacting payments from the peasantry. But the British treated them as the absolute owners of the soil. The first settlement, the "Permanent Settlement" of 1793, was therefore made with this class, and to introduce certainty, the revenue due from them was fixed in perpetuity. These "zamindars" were left free to make their own terms with the peasants, whose rights of occupancy and cultivation were at that time entirely ignored by the British newcomers.

In course of time it dawned on the British Land Revenue officials that the land was not the outright property of any one, but that all connected with the land had certain rights in it. Moreover the zamindar class found in Bengal and in certain parts of Bihar and Madras did not exist in some other areas, and the Government had to deal directly with the cultivators. In other areas, it was found that groups of villagers had rights in the land, as well as the actual

cultivators (a relic of the old system by which a family group or brotherhood held land in common). After the mistake of the Permanent Settlement was recognized, temporary settlements were made, which are revised every twenty or thirty years. Every effort was made to discover and define the land rights of the various parties to assess the land revenue on the party most closely approximating to the owner of the soil, and to give security to the cultivator, be he tenant or owner.

The result is that there are different types of land tenure in different areas. Over about half of the total cultivated area of British India the State deals directly with the peasant. The peasant possesses the right to cultivate, and to pass his holding on to his heirs; and the State possesses the right to a share in the produce. Over the other half the State deals with zamindar proprietors: some of these have their assessment fixed under the Permanent Settlement, while others are subject to periodic re-assessments under temporary settlements. There is also a large body of tenancy legislation on the various Provincial statute books, protecting the customary rights of the tenants, whose forebears in many cases have cultivated the same land for generations.

Rates are far less heavy than at any other time in Indian history of which we have any information. The first assessment under the Permanent Settlement was extremely heavy; it was fixed at about 20% of the average value of the annual income received by the zamindar from the land. But with the rise in prices that went on during the 19th century the ratios between rentals and land revenue has fallen and zamindars now pay 25% of their income as land revenue. In those areas where the revenue is collected from the peasant, the British first took over the prevailing system of taking half the gross produce, but this proved far too heavy a burden on the peasantry, and it was steadily reduced. Since about the middle of the 19th century the principle has been established of assessing the land revenue at half the *net* produce, that is to say, half of the profit left after expenses of production have been deducted. It can be calculated from village surveys that this normally represents from a tenth to a twelfth of the gross produce, so that the burden on the peasant is far less than it was even in the golden age of Akbar.

In spite of the lowering of the rate of assessment, the yield of the Land Revenue has gone up considerably during the nineteenth century. This is partly due to the rise in prices during this period; other reasons are the extension of the cultivated area and agricultural improvement.

No account of the land system would be complete without a word about the size of holdings. Hindu and Muslim inheritance laws provide for equal inheritance by the heirs; sometimes land is held and cultivated under the joint family system, but when the family becomes too big the land and the family are divided up. The vast increase in the population during the past century has greatly reduced

the average size of agricultural holdings and now in many cases holdings are so small as to be uneconomic

The land system is one of the biggest problems in India—perhaps it might be described as the biggest problem of all. The Land Revenue system is admitted by many to be unsatisfactory, even in its present comparatively light form it presses hard on the peasantry, and has very little relation to actual ability to pay taxes. It makes no allowance for big changes in prices such as occurred when the prices of agricultural produce slumped in the Great Depression of 1931. It is too light on the big landowners who can well afford to pay higher taxes. Current proposals for reform include an income tax on agricultural incomes instead of a fixed Land Revenue. The Assam and Bihar Legislatures have already passed acts subjecting income from land to income tax, and similar bills are under consideration in some of the other Provinces.

To tackle the fundamental problem of altering the inheritance laws so as to prevent the further sub-division of the land is beyond the powers of the present Government. Inheritance laws are so bound up with religious and social institutions that only a fully Indian Government could venture to deal with them. It is no light task that awaits the future government of a completely self governing India.

IRRIGATION

In no country in the world with the possible exception of Egypt is irrigation so important to agriculture as in India. For the rainfall is unevenly distributed, not only geographically, but also between the seasons and from year to year.

India has an average rainfall of 45 inches a year but there are immense local differences, Cherrapunji in Assam receives 460 inches a year, and is reputed to be the wettest place in the world while Upper Sind receives less than 3 inches a year. There are very marked rainy seasons, over most of India the bulk of the rain is brought by the south west monsoon and falls between June and September, only light showers occurring at other times. In the South the rain is brought by the north east monsoon between October and December but here also there are long periods of rainless weather. The worst feature of Indian rainfall is its variability from year to year. Although the average rainfall over the whole of India remains fairly constant from year to year, there are great local variations, rainfall in a particular locality sometimes falling to a half or even a quarter of the normal. It is estimated that in most parts of India one year in five will be a year of serious deficiency, and one in ten a year of such severe drought as to threaten major famine.

Irrigation is therefore vital to Indian agriculture, and from time immemorial peasants and rulers have devised means for conserving and utilising the available supplies of water. They fulfil different purposes ; some of these means bring water to tracts which otherwise would be desert, some are designed to supplement the rainfall in the dry season ; others are a protection against deficiency or failure of the rains.

Of the 280 million acres of cultivated land in India, some 56 million acres are irrigated, 40 million acres are irrigated by canals, deriving supplies from rivers or storage, and 16 million by wells.

Well irrigation is of immense antiquity. There are more than 2½ million wells in actual use all over India ; they are of many kinds varying from the mere hole in the ground to big brick or stone-lined wells irrigating hundreds of acres. Some of the shallow wells are operated by human power in much the same fashion as those along the Nile ; the water is lifted by means of a bucket at the end of a pivoted pole, along which the peasant walks to weigh down the opposite end. Most wells rely on bullock power. The Persian wheel is found in Northern India ; but the usual method of lifting is by means of a leather bag let down into the well over an overhanging pulley—the bullocks lift it by walking down a ramp about the same length as the depth of the well, and on reaching the top the bag discharges its contents into a sump leading to the irrigation channels. Mechanical power is being introduced here and there, either small motor pumps, or electric pumps in the areas where electricity is available. The farmer welcomes it as it saves his bullocks from a heavy strain.

In the United Provinces an extensive system of tube wells is driven by electric power generated by the canal water, and this irrigates over three quarters of a million acres. Elsewhere, wells are usually privately owned, but Governments encourage their use in various ways. Government loans are available for constructing wells, land revenue is specially assessed on land watered by wells ; and tenants who construct wells are protected against enhancement of rent on the ground of land improvement.

Tanks are most common in South India, though they are found in all Provinces. They are usually constructed by damming valleys and thus trapping the rainwater, which is let out as required. Some are very large, holding billions of cubic feet, while others are small affairs damming up some local stream. In earlier times it was considered a pious work for a king or noble to construct a tank, and village communities saw to their maintenance. In modern times some of the largest have been made by the construction of immense masonry dams. An interesting development is that hydro-electric energy is also generated at these immense headworks. One example is the Mettur Dam in South India, recently completed ; it is the biggest in India and one of the biggest in the world. It stores the flood waters of a great river, it supplements the water supplies of over a million

acres and has brought a further 300 000 acres under cultivation at the same time it provides electric power for a very wide area

Irrigation canals are of two kinds inundation canals and perennial canals. Inundation canals are those drawing supplies through cuts in the river bank they only flow during floods when the river level is high and while distributing the water over a wide area during the rainy season they do little to help cultivation in the dry season when recourse has to be had to well irrigation. Perennial canals have head weirs across the river at the starting point of the irrigation system which controls the river flow and directs the water supplies into the canals throughout the year.

Both systems have been in use in India for a very long time. The Grand Anicut in South India which is estimated to date from the 2nd century A.D. and which now irrigates 200 000 acres is of the latter type. The canals built by Muslim rulers in the 14th and 17th centuries in North India were inundation canals. But until recently the great schemes with which we are now familiar were beyond the bounds of possibility not only was engineering skill insufficient but there was not sufficient political stability to make their construction worth while or to ensure their upkeep. Most of the old irrigation works fell into decay in the disturbed years of the 18th century.

The present great canal systems are mainly the work of the last century. The whole system was begun by the East India Company repairing some of the old canals in the first half of the nineteenth century. In 1866 the Government of India decided to promote irrigation works as part of its famine policy and to finance them by means of loans. Canals are classed officially as either productive or unproductive. The former are those which yield enough revenue after ten years of working to cover their working expenses and the interest charges on capital cost. Most of the large irrigation systems in India are productive. Unproductive canals are those which are not directly remunerative but which are built in precarious tracts as an insurance against famine they are financed out of revenue from amounts set aside for famine relief.

On the whole the canal system has proved remunerative to the Government. The cultivator pays for the water that he uses in some Provinces the amount is calculated on the basis of his land revenue and is levied with it in one lump sum in others the rate varies according to the area and the crop grown and is assessed separately. The total outlay on canals has been Rs. 150 crores (£112 500 000) and taking productive and unproductive canals together the net return is about 6% on capital investment. Nor is the cultivator unduly charged for water the irrigation dues which he pays are far less than the extra return he obtains from irrigation.

Most famous of irrigation systems are the great Punjab canals. More than 12 million acres in the Punjab are irrigated of these some

4½ million acres were desert before the great irrigation systems were built, which have literally made "the desert blossom as the rose." Here are the famous Canal Colonies, which were colonised by agriculturists from other parts of the Punjab, specially chosen for their agricultural skill; and these areas, which half a century ago were dreary unproductive desert, are now the most prosperous agricultural districts in India.

The largest single irrigation system in the world is, however, the Lloyd Barrage and Canals in Sind. The Barrage is a mile long and supplies seven canals; the 6,400 miles of waterways distribute water at the rate of 46,000 cubic feet per second, irrigating over three million acres of crops every year.

The extension of irrigation is continually being discussed and planned in India. A number of new canal systems are under contemplation, which, when completed, should bring the total area under Government irrigation works up to about 50 million acres. Modern methods also make possible the boring of deeper wells and the utilisation of power for pumping, so that the subsoil water can be tapped to a greater extent than formerly. It is hoped to extend cultivation in the Indo-Gangetic Plains by the greater use of tube wells.

There are however limits to the extension of irrigation, which *after all cannot create water, but can only distribute water already* in existence between places and seasons. Some developments are still possible; in North India, though all the dry season river flow is already utilised, further developments are possible by building large dams for storage. In South India many storage schemes exist but more will probably be built.

The great irrigation systems have to a large extent achieved their original purpose of contributing to the prevention of famine. Millions of acres where water supply was insecure and where famine was a perpetual menace, have now had their water supply secured and the threat of famine removed from them. Millions more acres, formerly desert, are now prosperous farmlands. Yields of irrigated land are usually heavier than those of unirrigated land, and irrigation makes possible over millions of acres the growing of two crops a year instead of one. Both Government and people have benefited. Irrigation works have directly yielded a good profit to Government on investment, and have enhanced the return of land revenue; while the cultivator has benefited by the greater security of life and a greater prosperity.

SOIL EROSION

All life is dependent on the thin crust of soil which covers the lifeless rock of our planet and once man in his carelessness and his greed for rapid wealth destroys that crust life must cease.

Erosion writes Mr G V Jacks one of the world's authorities on the subject has been one of the most potent factors causing the downfall of former civilizations and empires whose ruined cities now lie amid barren wastes that once were the world's most fertile lands. The barren regions of North West China the vast desert of Egypt where once the corn for Rome grew, the ruins of ancient imperial cities in Iraq are all witnesses to the terrible effects of this silent destroyer of civilizations.

There have been wide investigations into soil problems in India of recent years which have established that erosion is taking place over large areas chiefly the foothills of the Himalayas and the uplands of Central India and the Deccan. In the foothills of the Himalayas a dramatic type of erosion is to be seen floods are cutting great gullies in hillsides and covering whole fields with barren sand while over the upland regions a slower though equally destructive process of sheet erosion is taking place which gradually removes the fertile soil from the fields.

Erosion is a fairly recent problem. We read in old books of thick forests where now there are scanty fields of fertile farms where now there are deserts. How is it that the desert is increasing in India and the soil becoming less fertile in many places?

Paradoxical as it may seem it is the very progress of India that has brought this problem about. It is the result of growing population and prosperity. India's population both men and domestic animals was formerly kept down by war famine and pestilence. Now she has known a century of internal peace the devastations of famine have been largely overcome by modern methods and improved communications while modern medical science is combating epidemic disease. The result is that the population has roughly doubled in the last half century and the soil is being put to an unprecedented strain.

The immediate causes of soil erosion are deforestation over grazing and the spread of cultivation in the hills. Consider how these are connected with a growing population. As human population grows so does the cattle population and both of these need food. More land is opened up both for cultivation and for grazing. Cultivation penetrates into the hills forests are cut down and the soil exposed. As village grazing grounds become insufficient for the villagers animals the cattle sheep and goats are sent into the forests to graze. They eat up the vegetable covering, where the forests are

cut down they eat up the young trees and prevent the re-growth of forest. On hillsides the soil is exposed, and when the rains come (the heavy, sudden rains of the Indian monsoon), they sweep away the fertile top soil, leaving the infertile subsoil exposed. This has little absorptive capacity, and when the rains fall they sweep over the land instead of soaking into it. Rains therefore cause floods, which cut ravines in the hillsides, and sweep over the plains, cutting into fields, and spreading sand and debris over the land. The rivers no longer flow evenly, fed by water from the rain-soaked lands of the hills; they are destructive floods in the monsoon, and thin trickles in the dry season, finding their way through vast sandy beds, the deposit of monsoon floods. Since the water runs away so quickly wells and springs are not fed, wells have to be dug deeper and eventually dry up. Again the sand brought by the monsoon torrents raises the river-beds on the plains, until they become higher than the surrounding country and heavy rains mean disastrous floods. In all these ways, soil erosion brings about disorganisation of the economic life of whole districts, and leads ultimately to the creation of deserts and the ruin of human life.

This process may take hundreds of years, as in North West China, or a few decades, as in the "dust-bowl" of the Middle West of the United States. In India it has been going on for a long time in some areas, while in others it is proceeding at a more rapid pace. This does not mean that India is faced with immediate economic ruin through soil erosion; but it is true that it has already become a serious problem in some parts, that the fertility of the soil is slowly deteriorating through erosion over large areas, and that all other efforts at economic progress are futile unless the deterioration of the good earth is stopped.

The remedies for soil erosion are known. In countries such as the United States and Russia the whole problem is being tackled on a vast scale, and their civilizations may yet be saved from this insidious menace.

The combating of soil erosion has two aspects. The evil has to be attacked at the root by the restoration of the vegetable covering of the hills; secondly the effects of erosion have to be removed by the reclamation of lands gullied or rendered infertile by uncontrolled floods.

The first step in any wide scheme of reclamation must be to close the uplands to grazing, so that the vegetable covering can be restored. This step presents great difficulty, because the increasing population has pushed its way up into the hills and requires the land for pastures. But it has been found that where land has been enclosed it yields a rich crop of grass, so that if the villagers can be induced to change their habits—to stall-feed their cattle from grass cut in enclosed lands—there will actually be an increase in the total supply of fodder available. Indeed, in some places where this change of habit has been achieved, the villagers have had a surplus of grass

which they have been able to sell to their neighbours. But even this reform will be useless unless the total number of cattle is cut down. India possesses more cattle per head of population than any country in the world, but most of them are hardly worth their keep, and the country would be better off with fewer animals of a better quality.

Side by side with the restoration of grass and forest must come the reclamation of badly eroded land, and the prevention of further erosion. Again, the methods are known. Gullies—if they have not gone too far—can be reclaimed by building dams to hold back the rainfall and prevent the soil being carried away, sloping fields should be terraced and embanked. Terracing is in fact an ancient practice in India. In the mountainous districts one can see terraced fields covering whole hillsides. But it has not been done scientifically, and it has hardly been done at all in regions of gentle slopes, where erosion is slower but is none the less deadly.

Soil reclamation is only in part a task for Government. To put through the whole programme would involve huge expense, the creation of a vast army of petty officials, and intolerable interference with the daily lives of the people. The Government can contribute a wise afforestation policy and guidance and education for the villagers. This has already been done to some extent. In the Punjab for instance the Province most seriously threatened by erosion, the Government has appointed special forest officers to teach the villagers anti erosion measures and they have had a fair degree of success. But such methods are slow, and disaster may overtake whole districts before they are effective.

The main part of the work must be carried out by the villagers themselves on the co-operative principle. Since the first and most important step is the closure of the hills to grazing stock feeding habits must be changed. Villages or groups of villages should develop fodder resources for the local livestock, village committees should take charge of the local grazing grounds and partition off portions of them for growing fodder. It needs co-operative effort also to secure such reforms as the reduction in the quantity of cattle and improvement in their quality, and to set to work on the large task of terracing, embanking and reclaiming gullies.

It may well be asked what chance there is of such a programme being carried out by the people themselves in such a large country, with such a conservative peasantry, a considerable proportion of whom are illiterate. A solution may come from an unexpected source—the Indian Army. The great majority of Indian soldiers are villagers, and a large proportion of them come from the areas threatened with erosion such as the Punjab. Soldiers in the Army learn those very habits of co-operative action and hard work which are necessary for the solution of the erosion problem, and they are all taught to read and write. It is a remarkable fact that most of the successful co-operative societies in the Punjab are run by groups of

ex-soldiers, who are also responsible for numbers of agricultural improvements.

Now the Army authorities have realised that the ex-soldiers have great potentialities for rural reconstruction, and they have set out to educate them for their return to their villages. In a remarkable series of pamphlets intended as a guide to Army discussion classes, the principles of better farming have been set out. One of the pamphlets in the series entitled "Green Hills" deals with erosion. It explains vividly the causes and consequences of erosion and explains the measures that are necessary to combat it. It is reported that this pamphlet aroused great interest and deep discussion among the soldiers. When we bear in mind that perhaps a million and a half villagers in the Army are receiving education of this kind we may hope that the leadership needed for the task among the villagers themselves may be forthcoming.

In conclusion we may quote from this pamphlet, which is written in language that the Indian villager, deeply religious as he is, will appreciate: "God made a good world, green hills and fertile land. It is man who has stripped the hills and made the deserts. If you will let Him do so, God will again clothe the hills and you can yourselves, by your labour and your brains, make the fields once more fertile."

THE FORESTS OF INDIA

The forests of India constitute one of her greatest national assets. The forests of British India cover nearly 176,000 square miles, about 20% of the total area, while those of the Indian States are almost equally extensive.

This vast forest area is scattered over the length and breadth of India from the Himalayan snows to Cape Comorin, from the arid tracts of Baluchistan to the dense jungles of Assam. It contains an infinite variety of types of forest vegetation, governed by variations in climate, soil, elevation and other local factors. From the point of view of vegetation, most of India is in the tropics, but in the mountainous districts sub-tropical and temperate forests develop, while in the higher Himalayan ranges even Alpine zones are found. Variations in rainfall, from the desert conditions of the North-west to the heavy rainfall of Assam, also develop different types of forest. There is hardly a type of tree that does not grow or cannot be grown in some or other part of India.

The forests of India are a source of considerable wealth. They yield valuable timber. Before the war the yield was about 1½ million tons a year, and India was almost self-supporting in timber. She imported a certain amount of teak from Burma, but in course of time this will be replaced by teak from new Indian plantations. The forests

also yield large quantities of fuel, about $4\frac{1}{2}$ million tons a year before the war. What are known as "minor forest products" are also valuable, these include lac, resins, gum, waxes, paper pulp, bamboos

The forests are not only of direct economic value, but are of vital importance to her whole agricultural economy. Forestry and agriculture are—or should be—closely integrated, forests provide fuel, timber and grazing for the villages. Indian forests are at present unable to provide enough fuel for the needs of the agricultural population. The main reason for this is that they are unevenly distributed over the country, a large part of the great northern plain of India and some parts of the coastal plains are practically denuded of forests. This has in one respect a particularly unfortunate effect, for the villagers are reduced to burning cowdung as fuel instead of wood and thus starving their fields of the best natural manure. It has been variously estimated that the cowdung burnt annually is sufficient to manure one sixth to one third of the cultivated land of India—an enormous loss to the country. The development of forests which will provide the villager with timber and fuel is one of the greatest needs of Indian forestry.

Forests are also vital to the preservation of the soil, the prevention of floods and soil erosion and the regulation of the climate. The forests, particularly those round the head waters of rivers, break up the fall of rainwater, their undergrowth acts as a sponge to hold the water, the flow of rivers is regulated and floods and soil erosion are prevented. The population of whole river systems is affected by the state of the forests at the head waters of the rivers. To what extent forests actually increase rainfall is still a debatable point, though many scientists contend that they attract rain clouds, but they conserve what moisture there is and thus contribute to a more equable climate. In India, with its extremes of heat and cold and its variable rainfall, the climatic functions of forests are of vital importance.

The forests of India were in a depleted and indeed almost ruined state at the beginning of the nineteenth century. The rapid increase of population that followed the establishment of internal peace led to further depletion, for men and animals moved into the hills, forests were cut down and over grazed and great areas in the valleys suffered from soil erosion and desiccation.

The foundation of the Forestry Service and of a scientific forest policy were laid in 1865, when the first Inspector General of Forests was appointed. Proper forest management is therefore only eighty years old in India—a very short period if we take into consideration that the growing of a single major forest crop takes from 50 to 150 years. The Government acquired large areas of forest and also forested waste lands. By now some two-thirds of the forest area of British India, comprising 14% of the total area, are State forest, while the remainder of the forest is in private hands. These private

forests are unfortunately disappearing through over-grazing and over-felling ; the State is trying to acquire them so as to pursue a unified policy in all forest lands.

The main principles of forest policy were laid down at the outset and they have been followed ever since. Underlying them is the general principle of "the greatest good to the greatest number"—which in this connection means that the interests of agriculture, which supports a large number of people, must be put before those of forestry, which supports relatively few, even though forestry yields a considerable revenue to the State. But the preservation of forest, as we have seen, is itself essential to the interests of agriculture ; therefore cultivation must not be extended to reduce the forest to less than the broader interests of the country require.

Forests are divided into four classes ; first, protective forests, those which are necessary for the prevention of soil erosion and floods ; secondly, timber forests, which form a source of revenue to Government ; thirdly, minor forests, which do not yield major timber crops but are chiefly to supply fuel, fodder and timber to the local population ; fourthly, pastures, which are not strictly forests but are put under the management of the Forest Department for convenience. Of course these classes overlap ; in particular, all forests of every class are likely to have a protective character, and must be carefully managed so that they can effectively perform their protective functions.

Forests are further classified into reserve forests and protected forests. In reserve forests (in which class the timber forests usually fall) there is a very strict control by forest officers ; in protected forests the local villagers usually have rights of grazing, fuel and fodder cutting, which are recorded and supervised by the forest officers. In this way the interests of the villagers are served, while at the same time the forests are protected from over-grazing and over-felling.

Although the interests of forestry are subordinated to those of the agricultural consumers, the forests are managed so as to yield a sustained and increasing revenue. Working plans are drawn up for literally a hundred years ahead, and plantation of new forests, felling of existing forests and the reforestation of felled plantations, are regulated accordingly. For many years now the forests have been yielding a surplus of revenue over expenditure, and the revenue has been steadily increasing.

Forestry was at first administered by the Central Government, but in the recent constitutional changes it was handed over to the Provincial Governments. The Central Government however still retains an Inspector-General of Forests and a Central Research Institute at Dehra Dun in the foothills of the Himalayas. Closely connected with the Forest Research Institute are the Forest College, which trains forest officers, and another for forest rangers. All the Provinces send their forest staff to these colleges for training. At the same

time many of the larger Indian States maintain excellent forestry services and also send their forest officers to Dehra Dun for training. In these ways in spite of the Provincialization of Forestry a unified policy is being developed for India as a whole.

The Forest Research Institute in Dehra Dun which was founded in 1906 has five main branches: Utilisation, Forest Botany, Entomology, Silviculture and Chemistry, and Minor Forest Products. Silviculture deals with the production side of forestry; much of the actual research work is done in the Provinces though the Central Silviculturist co-ordinates the work. The Botany branch is chiefly concerned with the identification of species but it also has a mycological section dealing with fungus diseases of trees and fungoid destruction of timber. The Entomology branch researches into the control of insect attacks on tree crops and insect damage to timber. The Chemistry branch is concerned with research into drugs, oils and other minor forest products. There is also a Soil Chemistry section. The Utilisation branch has sections dealing with timber testing, wood working, wood preservation, timber seasoning, paper making and wood technology. The Research Institute has through decades of solid research work contributed greatly towards the improved productivity of Indian Forests and the better utilisation of forest products.

The Indian forests and Forestry Services have made a considerable contribution to the war effort. The amount of Indian timber taken by the Defence Department for military purposes is about a million tons a year. Much Indian timber has been exported for military purposes to the Middle East and even to North Africa.

The fellings necessary to supply the enormously increased military demand for timber have naturally meant overfelling and have upset the normal working plans for Indian forests. Down to the end of 1943 there was an excess felling for the war years of 162%—in other words one and a half years' advance felling. In the teak forests there has been advance felling for three to five years. This is in the words of the Inspector General of Forests, an infinitesimal overdraft on the forest capital of India—far less than the advance fellings of other countries. But the war has brought compensations. Not only has the pressure of war needs brought out new uses for Indian forest products but many species of trees which were hitherto considered worthless have now proved their economic value and they will add to the permanent wealth of the Indian forests. The war fellings moreover have in no way damaged the reserved forests from the climatic and physical aspects.

The further development of forestry is part of the Government of India's post-war planning and it already has under consideration a tentative scheme drawn up by the Inspector General of Forests. The objectives are three: to bring the forests back to their pre-war productivity; to tackle the problems of floods, soil erosion and desiccation by the afforestation of vast tracts of land; and thirdly to develop village forests so as to provide the villagers with adequate

fuel supplies. This last objective is emphasised as "the main problem in any reconstruction scheme." The scheme envisages an immense increase in the area under forest, and the acquisition by the State of private forest, which under private management is in danger of disappearing.

Much of this new forest will be minor forest close to villages, and its management will include the control of grazing. This will involve the education of the villagers in the proper use of forest; they will also have to be persuaded to reduce the number of their cattle—at present far in excess of the country's capacity to feed them adequately—and improve their quality. Much of the minor forest will have to be created in the relatively dry zones of northern India; but research has shown that it is possible to develop forests even in dry areas by the aid of irrigation, while some types of thorn forest will grow even without irrigation.

It is estimated that between 50,000 and 100,000 square miles of additional forest will be required; since there are 288,000 square miles of "waste" land half of which is classed as cultivable, the problem is not insuperable.

INDIAN FAMINES

The danger of crop failure is ever present in India because of the nature of the climate, though the possibility of these failures leading to actual famine is every year being rendered less and less by the application of modern scientific methods. By far the greater part of the cultivated area of the country is dependent on the seasonal winds, the monsoon, which is notoriously capricious. A very slight variation in the direction of the wet winds may cause a usually well-watered district to become a desert; a monsoon which comes a fortnight too soon or a fortnight too late may ruin the crops; an excessive monsoon or a cyclone may cause floods and prove as disastrous to the crops as a drought. Crop failures may occur over a small area, when they do not necessarily lead to famine conditions; or they may occur over a considerable part of the country and constitute a major problem.

The history of India is dotted with the records of great famines, some of them big enough to ruin empires or to alter the channels of trade. The calamitous famines appear to occur, roughly speaking, towards the end of every century and half-century; and there have been severe famines every ten years or so. No famine has ever affected the whole country at once, but scarcely a year has passed without some natural disaster of flood or drought giving rise to crop failure in some or other part of the country.

For centuries famines were regarded as divine visitations against which man had but little remedy. A famine often meant the death

from starvation of a large part of the population the migration of most of the remainder, and depopulation and economic ruin for a generation afterwards. The only protection the peasantry had against famine was to store surplus grain in good years, but this was no protection against a succession of bad years and could only tide them at best over one bad year. This is no uncommon occurrence, it is said that the great famine of 1398 was preceded by twelve bad years. Charity was frequently dispensed by rulers, who also remitted the land revenue during such crises, many of them kept stores of grain at their capital for the purpose. But in the absence of good transport they could only feed the starving in the towns, where they congregated and this added the horrors of epidemics to those of famine. In time of political chaos even this slight relief was not available, the peasants' stores of grain were not safe from plundering and the evils of famine were unmitigated.

It is only within the past three quarters of a century, with the development of modern means of transport and a modern and unified administration that it has become possible to fight famine with any degree of success. It is now normally possible to bring food from areas of abundance to deficit areas, and the problem of famine has changed its character. It is now not so much a question of starvation as of economic dislocation caused by local deficits of food and rising prices—famines of work rather than of food', as it has been well expressed by an experienced administrator. Indeed the very word 'famine' has changed its meaning in India. It has ceased to connote a state of widespread starvation, misery and ruin, and has become a technical term for a crop failure wide enough to call for the application of certain administrative measures known as 'the Famine Code'.

There have in fact been a number of severe famines during this period. In 1860 there was severe drought and crop failure in the central plains of Northern India but the recently constructed railway brought the necessary food. In 1866 drought in Orissa and along the eastern coasts caused a famine of the old type, for there were as yet no railways in these districts to bring food, and the mortality was heavy. In 1878 nearly the whole of South India and parts of the North suffered from drought, the relief given was inadequate and there was again heavy mortality. But the Government learnt many lessons from its mistakes; a Famine Commission was set up to inquire into the disaster and it made many valuable recommendations both for dealing with famines when they came, and for preventing the worst effects of famine by developing the economic resources of the country. When therefore the great famine of 1897 occurred—one of the most widespread on historical record—the administration was able to deal with the calamity with comparatively little loss of life or economic dislocation. A smaller famine two years later was not so well handled as the Government had hardly recovered from the previous famine but again loss of life was small. In the famine of 1907 the operation of the famine measures was so successful that it was claimed that not a single life was lost through starvation. It is only at the present day,

when the country's economic life has been disturbed by total war, that we come to a famine at all comparable with the disasters of past centuries.

Since the middle of last century, the prevention of famines as far as possible, and the alleviation of distress when they do occur, have been a constant preoccupation of the Government of India. The Government has evolved a long-range policy for economic development which enables the people to bear the effects of famines; it has also evolved a detailed and elaborate system for dealing with famines, which is embodied in the Famine Codes.

The Famine Commission of 1880 recommended that the Government should push on with the "protective" public works of railways and irrigation works, and it is largely with a view to the dangers of famine that the great railway and irrigation schemes of India have been so rapidly developed, in spite of the poverty of the country. The great irrigation works built within the past hundred years now serve about 20% of the total cropped area, and we may say that this area has been permanently removed from the menace of famine. The expansion of the railways has meant that, in normal times, food from outside can be brought to every part of India when the local supplies fail.

But local crop failures, as we have seen, are bound to occur. There are natural limits to the possibilities of extending irrigation, and the greater part of the country must remain subject to the caprices of the monsoon. Since food can be rushed to the effected area, crop failures do not now involve widespread mortality from starvation, but they dislocate economic life by leaving the peasant impoverished and indebted, throwing the landless labourer and the village artisan out of work, and checking agricultural operations. It is just these classes that have no reserves, and they are quickly reduced to a helpless condition. The object of the famine codes is to save life, maintain efficiency, and to restore normal conditions as soon as possible. The first general code was drawn up by the Government of India in 1868, and was based on the administrative experience gained in coping with the famines of previous years. Provincial Governments have built up their own codes based on it, modifying them as experience suggested, till the codes now form an elaborate body of rules regulating the work of famine relief from the first sign of distress to the final closing of relief works.

Throughout India crop returns are carefully watched, and as soon as it is clear that a general crop failure is taking place in a particular area, it is declared a famine area and the machinery of famine relief is set in motion. In normal times (that is, excluding the abnormal conditions due to the war) the rise in prices consequent on local food scarcity proves sufficient to bring foodstuffs into the area, and Government have in the past been able to rely on private trade to adjust the supply of foodstuffs to the demand. The import of food into the area is, however, carefully watched, and if necessary Government supplements private trade by arranging for further imports.

There arises the problem of distributing the food to those who need it, but who are without money to buy and cannot work in the famine-stricken fields to earn it. The main policy is to provide paid work on public relief works for those who are capable of work, while maintaining those who cannot work, in their own homes. Famine relief works are begun for the former class, and since India is a poor country on which the burden of famine relief is heavy, these schemes as far as possible are for remunerative public works. Railway construction, road building, irrigation works, are pushed forward when famine conditions throw large reserves of labour into the market. The aim is to begin the work as soon as famine conditions show themselves so that the deterioration of physique is avoided, and Public Works Departments are expected to have schemes in readiness for famine emergencies and even to maintain stocks of tools so that work is not delayed. Provision is also made for Government loans on low rates of interest to landholders, so that they may restart their cultivation as soon as possible. Often the larger landowners take advantage of these special loans to improve their lands. These loans have a double advantage: they reduce the need for providing temporary employment on public works, and they hasten the return to normal economic conditions. Arrangements are also made for cattle relief so that the cultivator's chief capital asset shall not suffer unduly, and loans for the purchase of new cattle are made on easy terms. If the famine is severe, land revenue is remitted.

Science has as yet devised no way of curing the monsoon of its caprices, or of finding a substitute for rainwater over three quarters of the land. Crop failures will therefore continue to occur. But their evil effects have largely been mitigated. The problem of widespread death from starvation could be regarded as solved in the first forty years of the present century. Moreover, the loss of productive efficiency, which formerly might cover a generation, is now practically limited to the famine years and the cultivator can return to his old life as soon as the rains fall and make agriculture physically possible again. To find a parallel to the 1943 famine in Bengal we should have to go back a century—and that catastrophe was due to abnormal war conditions.

As the country progresses economically the evils of famine will be yet further mitigated till they cease to be a menace to the well-being of whole districts. Agricultural progress will increase the reserves and the staying power of the peasant so that they can tide over bad years, industrialization, by providing alternative means of livelihood will relieve the pressure of population on the soil and increase the standard of life of town and country alike.

HOW INDIA IS GOVERNED

India's governmental machinery is necessarily complex, because the country is large. But if we bear in mind one or two outstanding facts, it will be simpler to fit all the pieces of the machinery together. The chief facts about the government of India are these : First, India is politically divided into two, British India, the part directly administered by the Indian Government, and the Indian States, which are directly administered by Indian Princes. Secondly, British India is divided into eleven Provinces, each with its own Governor at its head ; while there is a Central Government, with the Viceroy at the head, which has control over the whole of British India. There are also certain minor administrative areas known as Commissioners' Provinces of which the most important are the central enclave of Delhi and Baluchistan ; these are administered by the Central Government through Chief Commissioners. A third important point is that the British made a definite promise of self-government to India during the last World War, and have been fulfilling that promise by stages. Some of the greatest complexities in government are due to the fact that India is in a transition stage on her way to full self-government.

The Indian States comprise about a third of the land and a quarter of the population of India. They have their own independent, though protected, governments, the protection involving in all cases control of external affairs, and in most cases a certain supervision of internal affairs which is, however, only exercised sparingly. The Rulers are autocrats in their own dominions, though some have granted constitutions to their subjects.

Now let us look at the bigger and more important section of India, namely British India. The Central Government deals with matters which concern the whole of India, for example, defence, foreign affairs, commerce, communications. The chief central institutions are :

1. The Viceroy (known in strict constitutional language as the Governor-General).
2. The Viceroy's Executive Council.
3. The Central Legislature, which has two chambers, the Council of State and the Legislative Assembly.

The Viceroy is appointed by the Crown in England and usually holds office for five years. He is usually an English nobleman of high rank. He takes general orders from England about his policy, although he has a great deal of power to make decisions for himself. Indian affairs in England are in charge of a member of the British Cabinet, the Secretary of State for India, who is at the head of the India Office. Big decisions about India are taken by the Cabinet, in which of course the Secretary of State for India plays an important

part, and the Cabinet is responsible to Parliament for its conduct of Indian affairs as of everything else. The final control of Indian affairs is in England though this control is becoming to an ever increasing degree limited to the issues of policy only.

The Viceroy is assisted by an Executive Council. This consists of fifteen members including the Viceroy himself. These are appointed by the Crown though on the Viceroy's recommendation. They may be either Indian or British, at present ten are Indians. They correspond to Ministers in other countries and are in charge of the various departments of Government. The Viceroy himself is in charge of Foreign Affairs. The Commander in Chief is a member of Council by virtue of his office and is in charge of Defence. The Council acts like a Cabinet in that it takes collective decisions, and although the Viceroy has the power to over-ride its decisions if he thinks the peace or safety of India require it, this power is in practice seldom used. The Council therefore has very real power.

In describing the Central Legislature a word has to be said about the principle of communal representation which is found in all Indian Legislatures. This grew out of historical causes. In the earlier days of British rule in India, everything, including the making of the laws, was in the hands of councils of British officials. But the British wished to consult non-official and Indian interests, and so in course of time people representing various interests were nominated to the Councils for law making purposes, and later the principle of election was introduced. Among the special interests which demanded separate representation are certain religious groups who are in a minority. So in the Indian legislature there are (1) officials (2) nominated members, (3) elected members, and among these last there are (a) members representing general constituents (b) members representing special interests and religious groups.

The Assembly, which has 145 members, has about one-third nominated members (including officials) and the rest elected. The Council of State has 60 members, of whom 36 are elected and the rest nominated. There is a high property qualification for the franchise for the Council of State, that for the Assembly is not quite so high. Legislation has to pass both Houses and to receive the assent of the Viceroy, but the Viceroy has the power to "certify" bills rejected by the Legislature, if in his opinion it is necessary in the public interest that they should be passed and thereupon they become law. He has also the power to issue ordinances in times of crisis. The Legislature has no direct control over the policy of the Executive Council, but Members of Council sit and speak in both Houses and members of the Legislature have the right to ask questions and to move resolutions criticising Government, so that the Legislature has a strong influence on the actions and policy of the Central Government.

It is in the Provinces that the biggest advance towards self-government has been made. The Provincial Governments deal with

local subjects such as law and order, education, public health, industries, agriculture, and so on. Each Provincial Government consists of :

1. A Governor.
2. A Council of Ministers.
3. A Provincial Legislature.

The Governor, like the Viceroy, is appointed by the Crown ; but his position and powers are very different. The real rulers of the Provinces are the Ministers, who are responsible, not to the Governor, but to the Provincial Legislature. The Governor chooses the Provincial Ministers ; but they have to be members of the Legislature and must have the confidence of the party or group of parties that is in the majority in the Province. The Legislature therefore exercises a real control over the Ministries, and can get them dismissed or their policies changed by an unfavourable vote. Although the Governor has certain special responsibilities, chiefly for the prevention of any menace to the peace of the Province, in practice the Governors have not interfered in the day-to-day work of the Ministers. Provincial self-government is therefore a fact.

(At the moment there is no self-government in seven Provinces. In eight of the Provinces the Congress Ministries resigned at the beginning of the war, alleging as a reason that the Viceroy had declared India a belligerent country without consulting the representatives of the people. In these Provinces the Governors rule with the aid of official Advisers. They are replaced by Ministers as soon as a Ministry commanding sufficient support can be formed ; this has already happened in two Provinces.)

The Provincial Legislatures vary in composition from Province to Province ; some have two Houses and some have one. As in the Central Legislature, there are general constituencies and special constituencies to represent religious minorities and other special groups. The nominated element is small, and the franchise is much wider than for the Central Assembly. In general all owners of property and all educated persons, men and women, have the right to vote.

The Government of India Act, 1935, represented a further step in the fulfilment of the promise of complete self-government for India. The Act set up a federation of all India, including the Indian States as well as the autonomous Provinces of British India. The latter are already functioning under the Act as described above. But for various reasons the Indian States and the principal political parties have not accepted the provisions with regard to the Central Government ; this, therefore, continues to be conducted as it was before the Act was passed, though with a good many modifications introduced by the Act itself. This is how the matter stands at the present moment.

Great changes are contemplated for the post war period of which the chief, as envisaged by the Cripps proposals, is that representatives of Indian peoples shall frame their own constitution. Constitutional difficulties in India are still very largely caused by the profound differences of race, religion and language which exist among the Indian peoples themselves and which it seems that only infinite patience and mutual good-will can overcome. In the meantime all the pledges of the British Government stand and the responsibility for framing their future constitution will as soon as the war is over, become an Indian responsibility.

STEPS TO SELF-GOVERNMENT IN INDIA

'The British Empire', it has been said by an eminent British historian, "was acquired in a fit of absence of mind". This is almost literally true of the British conquest of India. It was by little more than an accident that the East India Company, originally formed for trading purposes, found itself the ruler of vast lands in India. British rule was at first paternal and despotic, modelled largely on the traditional Indian pattern. But as Western ideas of nationalism and democracy percolated into India, both British rulers and Indian ruled began to think in terms of self governing institutions for India. While the rulers have long been working out a policy of slow political evolution, the growth of political consciousness among the educated classes of Indians has accelerated the process of political development.

Indian political history can be said to have begun in 1885 when the Indian National Congress held its first session. At first the Congress put forward moderate demands representative institutions and the right of Indians to hold the higher official posts on equal terms with Englishmen. But after a time Congress split between the Moderates, who wanted reforms within the British Empire, and the Extremists who wanted to leave the British Empire altogether. Most Indians were prepared to use peaceful methods of change, but unhappily a few were in favour of violent methods and adopted the weapon of assassination. These terrorists were very few, and disowned by sober Indian opinion, but their murderous deeds seriously harmed the cause of Indian political progress.

On the whole opinion has been sympathetic to the Indian demand for political freedom. One of the founders of the Congress was an Englishman and in its earlier stages it received much help from Englishmen. Long before Indian opinion became self conscious, we find a great Englishman saying, in the Parliamentary debate on the Government of India Act of 1833, "It may be that the public mind may expand under our system until it has outgrown that system,

that by good government we may educate our subjects into a capacity for better government ; that having become instructed in European knowledge, they may in some future age demand European institutions. Whenever such a day comes, it will be the proudest day in English history." This utterance was prophetic ; and Macaulay voiced the ideals which have underlain the policy of Great Britain towards India.

But that policy has been one of gradual change and experimentation. It has always been felt, and perhaps most strongly by India's sincerest well-wishers, that the process of educating India for self-government on Western lines could not be hurried. Moreover many people, both English and Indian, have felt doubtful about the suitability of institutions on English lines for India. The vast masses are ignorant and illiterate and do not understand the vote. There are a number of different religions in India, organized in separate groups that can easily form the basis of separate political parties, and have in fact done so to a large extent. It may well be asked if the English Parliamentary system is really applicable to such a situation ; for inherent in that system is the principle of the rule of the majority, which in India is likely to be interpreted in terms of the domination of a permanent majority to the detriment of permanent minorities.

Besides, it is difficult to forget the lawless state of India in the 18th century, an unhappy period when the once great Moghul Empire was breaking up. It was the presence of the British at that time which brought order and peace and improved the economic conditions of the country. It is the consciousness of the importance of these achievements that makes them feel responsible for the continued good government of the country. They regard the activities of terrorists and the Hindu-Muslim disturbances which occasionally break out as likely to undermine the edifice of security which has been so laboriously built up. Some of them even fear there may be civil war between Hindus and Muslims if India is left to herself. Politically-minded Indians argue that these fears are exaggerated, but they are sincerely held by a number of British people in India, and help to explain the policy of slow change.

The policy may be summed up in the words of the famous Declaration of 1917 as " the gradual development of self-governing institutions with a view to the progressive realisation of responsible government in India as an integral part of the British Empire." Indians were to be given responsibility as and when they proved themselves ready for it. The judge of the time and manner of advance was to be the British Government, which felt itself ultimately responsible for the welfare of the Indian peoples. In spite of many difficulties and some hesitation, progress has been made, and India now stands on the threshold of complete self-government.

It is interesting to trace the steps by which the change has been brought about.

1. A hundred years ago the Government was purely official. There was a Governor-General assisted by an executive Council at the head of affairs, in the Provinces, too, there were local Governors with their Councils—all officials and all Englishmen. These Councils also made the laws.

2. In 1861 a few non-officials were appointed to the Councils for the purpose of making laws. The first Indians were nominated in the following year.

3. In 1883 experiments in local government were made. The municipalities were made largely elective bodies. This was done as the then Viceroy announced, "chiefly as a measure of political and popular education."

Congress agitation began, as we have seen, in 1885, and their chief demand was for election of members to the Legislative Councils.

4. In 1892 the Councils were made bigger, and the Governors adopted the practice of nominating members on the recommendation of representative bodies, such as Chambers of Commerce, Universities and Landholders' Associations.

5. In 1908 the principle of election to the Legislatures was introduced, and the non-official element in them increased.

Then came the first World War. Indians proved their loyalty to the Allied cause, and Indian soldiers fought magnificently on many battlefields. It was decided in 1917 to take further big steps towards the goal of self-government.

6. In 1919, a limited degree of responsible government was introduced in the Provinces. The Provincial Governors were assisted not only by their official councillors as before, but by a body of ministers responsible to the Provincial Legislatures. The official Councillors were in charge of "reserved" subjects such as law and order, while the ministers were entrusted with social and economic subjects such as education, public health and co-operative societies. This system was known as 'dyarchy', or duality of rule. At the same time the elected element in the Legislatures was increased so as to have everywhere the majority over the official and nominated members, and the franchise was considerably extended. In the Central Government a two-chamber Legislature was set up, with a certain amount of control over the Budget. But the central executive remained in the hands of the Governor-General and his Councillors.

7. In 1935, reforms which govern the present Constitution were introduced. A further advance was made by the grant of full responsible government in the Provinces, all the ministers are taken from and responsible to the Legislatures, and the officials become servants of the ministers. The franchise for the Provincial Legislatures was made very wide. Proposals for the introduction of a Federation at the Centre were also made, and had these come into operation, something

like "dyarchy" at the centre would have been introduced, with some of the central executive ministers responsible to the central Legislature; however, these proposals have not yet been carried out.

8. Finally come the Cripps proposals, which constitute a revolution, since they leave the Indian people free to make their own constitution after the war; meanwhile the central Executive Council was to be Indianized. Had the Indian political parties accepted these proposals, India would have gone yet another step further on the road to complete self-government.

How far have Indians won self-government through all these changes? The Provinces have real self-government under the reforms of 1935; Indian ministers, chosen from the people's representatives, carry out the programmes of popular parties. The official services have largely been Indianized; Indianization of the Army and Navy is going on steadily, and the Indian Air Force has been an Indian service from its inception. Although there is no popular control of the Central Government, Indians play a large part in it; more than half of the Viceroy's Executive Council are Indians. The Indian Legislature has controlled tariff policy since 1921—a very real test of freedom.

Indians have not yet control over the subjects of foreign policy and defence, nor over the finance necessary for these subjects; and it is over these matters that controversy is going on. In the midst of a war drastic changes are obviously impossible. But Indians have gained much experience in government in the past century, and, once they can agree on a constitutional system that gives play to the many divergent forces within the country, the way will be open for them to take the final steps to complete self-government.

THE INDIAN PRINCES

People often speak of India as though it were all under one Government. This is not strictly true. Two-fifths of the land of India, on which live about one quarter of its population, consists of Indian States governed by Indian Princes. There are 562 States, the biggest of them as big as England or Scotland, the smallest of them comprising only a few acres. Some have a long and illustrious history stretching back for centuries, some were formed comparatively recently, in the turbulent days of the 18th century, when the Moghul Empire was breaking up. The Princes are romantic figures; they loom large in the popular illustrated Press, as magnificent rulers clad in brocades and jewelled turbans, keeping cars and race horses, riding on elephants and entertaining lavishly. Most of them, it is true, live in splendour, and to go to one of the great festivals or State functions in an Indian State is a glimpse of fairyland. Yet they are by no means merely picturesque figureheads, but have considerable political importance and powers.

Their present position and their relations to the British can best be explained if we consider the way in which the British came to be masters of India. Before the British came, India was divided up into a large number of kingdoms which were frequently at war with each other. Some of these became powerful and built up Empires like the Moghul Empire, they did not always destroy the other rulers but kept them in a subordinate position, owing them allegiance and paying them tribute. When powerful Empires broke up new kingdoms were built on the ruins. Sometimes old dynasties revived sometimes a local governor seized power and made himself king sometimes groups of military adventurers carved out kingdoms for themselves. The earlier history of India is therefore a complicated history of rival kingdoms, of rising and falling Empires, of wars and alliances.

Into this divided India, from the 16th century onwards, came the European traders. The British came as traders and were faced with two big difficulties, one was the rivalry of the French, the other was the disorder in India that arose with the crumbling of the Moghul power in the 18th century. They therefore had to gain control of some territory in which they could establish peace and order, and to enter into agreements with some of the Indian rulers in order to oust the French. Both the British and the French plunged into the ancient Indian game of wars and alliances, and in the end the British drove out the French, acquired direct control over considerable territories and found themselves with a number of Indian allies. At first the British treated with the Princes as equals, but as the British became more powerful the Princes became subordinate, and were regarded as "subsidiary allies".

The relation between the British power and the Princes has been described as one of "paramountcy". This has never been defined in exact legal terms, but it refers to the superior position of the British power in India which in fact limits the sovereignty of the Indian Princes. The Princes are permanent but subordinate allies of the British, they are not allowed to conduct foreign relations which are conducted entirely by the Paramount Power. The extent to which Paramountcy involves intervention in the internal affairs of the States has varied from time to time and even now varies between one State and another. In general, the Princes have been free to conduct their internal affairs as they please, as long as they do not in any way threaten the peace of British India (the parts directly under the administration of the Government of India). The rulers of the larger States are left almost entirely free and are practically sovereign in their own domains, but there is more supervision in the smaller States. Control is exercised in a number of ways. Many of the larger States have their own armies which they are assisted to arm and train on modern lines by the Government of India. Disputed successions call for the intervention of the Viceroy, if the ruler is a minor, the Viceroy usually appoints the Regent. If there is serious misrule, the Viceroy intervenes, in the worst cases the ruler is deposed.

and another appointed in his place. But such intervention is rare. At the same time the British power undertakes certain obligations to the Rulers, to protect them from foreign aggression, and to uphold their rights, privileges and dignities.

How are the States ruled ? It is impossible to make any generalisation, since the States vary not only in size but in the standard of administration. It has been well said that "The keynote of the government in the states is personal rule." The Rulers are survivals from the days when monarchs were absolute, and on the whole they are autocrats within their own domains and jealous of their power. That does not mean to say that their rule is bad. Some are benevolent autocrats. When a Ruler takes a keen personal interest in the administration of his State, progress is swifter than in the Provinces of British India, where there is a ponderous official machinery to be moved. Some of the States are ahead of the Provinces in social reform, education and public works. It is noteworthy that State service has attracted some of the ablest of Indian administrators, since as long as they have the confidence of the Ruler they get a free hand, and can adopt bold administrative measures which would be impossible in the slower-moving Provinces. Many of the Rulers are lavish patrons of the arts; the modern cultural renaissance owes a deep debt to Royal patronage. Other rulers are not so good, and are accused of levying oppressive taxes, of extravagant personal expenditure, of failure to develop their States resources. A few rule so badly as barely to escape the heavy hand of the Paramount Power.

The Rulers are not insensitive to the changing world around them. In British India there is a trend towards greater democracy, and the States cannot but be affected by it. In many of the larger States there have come into existence in recent years organizations on the lines of the Congress Party in British India, which are pressing for the democratization of the Governmental machinery of the States. In all the larger States the Rulers have now granted constitutions setting up legislatures with control over legislation and finance, and some of the smaller ones have followed suit. Many of the Rulers now received fixed sums for their personal expenditure from the revenues of their States, while the rest is used for the general administration and for such developmental services as education, public health and medical services.

A much-debated question is that of the relations of the Princes with British India. As British India progresses towards self-government the Princes have looked carefully to their own position. Hitherto their only constitutional link with British India has been through the Viceroy, who is both Governor-General of British India and the representative of the Crown to the States. But geographically India is one and a number of common interests arise. It was proposed by the Government of India Act of 1935 to set up a Federation of the Provinces and States; the Princes were to give up part of their sovereignty and in return were to nominate about a third of the

members of the Federal Legislature. The scheme was to come into operation as soon as an agreed number of Princes had declared their willingness to accede to it. But excellent though the scheme looked on paper, in practice a number of difficulties have arisen and the scheme has not yet materialised. Meanwhile events have drawn the Princes closer together, in 1921 a Chamber of Princes was formed to give expression to their common interests.

The War has given the Princes the opportunity of displaying their traditional loyalty to the British connection. As soon as war broke out, they pledged all the resources of their States to support the British cause. They have given enormous sums to War Funds, and have presented aeroplanes, tanks, warships, ambulances. The State Armies have been expanded and are fighting side by side with the British Indian Armies.

What of their future? In a democratic world these hereditary autocratic rulers appear something of an anomaly. But India is intensely conservative, and the age-old reverence for royalty is still very much alive. We must remember that the India States are truly indigenous, a product of the very soil. However, much progressive thinkers may criticise the States, very few would wish to see them disappear. If they adjust themselves to the changing situation in India they are likely to survive and will be able to exercise much power for good.

INDIAN POLITICAL PARTIES

Indian political life is complex. There are a large number of political parties but they have a somewhat different character from those in other countries for they are based partly, though not entirely on religious divisions. There are three main types of parties. There is the Indian National Congress which is in a class by itself, there are the communal parties based on religious communities, and there are the Left wing parties the membership of which cuts across communal divisions.

The Indian National Congress is the oldest, biggest and best organized of the political parties with the highest funds behind it. Founded in 1885, it was at first the party of urban middle class intellectuals, its demands were moderate and it was enthusiastic for the British connection. But it was captured by the extremists and became the party of complete independence.

It stands united on the issue of independence, but there is disagreement about everything else. It includes intellectuals, big industrialists, trade unionists, and peasants. Within it are medievalists of the type of Mr Gandhi, enthusiastic advocates of industrialization, Socialists and Communists. But perhaps the strongest

clue to the inspiration of Congress is that it draws its funds largely from the big Hindu industrialists, and enjoys much support from the Hindu trading classes throughout the country.

Such a mixed body could only be held together by a powerful central organization and dominant leaders. The Congress has both. With regard to organization, there is an annual meeting to which all members can go. The President for the year is elected by the delegates from the local Congress groups; he selects his own Working Committee of about 25 members which carries on the business of Congress throughout the year. There is an All-India Congress Committee of about 250 members chosen by the local groups which meets two or three times a year. The real power resides with the Working Committee, however; it is sometimes called the "Congress High Command," and has been compared with the Fascist Grand Council.

In the Congress High Command itself, the outstanding figure is undoubtedly Mr. Gandhi. The President is usually his nominee and the Working Committee is usually a list of which he approves. He captured the Congress in 1920 and has dominated it ever since, though at times his influence seems to weaken. His chief strength has lain in his appeal to the masses, for whom he is a religious leader rather than a politician. Recently powerful opposition to his policy has grown up within India. His originality lies in the method of "non-violence". The essence of this is a refusal to co-operate with the oppressor; as this will lead to further oppression, this has to be borne unresistingly, until the oppressors' heart will finally be softened and he will yield to the demands of the oppressed. It is due to Mr. Gandhi's influence that Congress has usually preferred a policy of wrecking British reforms to attempting to work them. There was a relatively happy period from 1937 to 1939 when the Congress Ministries took office in eight out of the eleven Provinces, and did creditably in spite of administrative inexperience; but at the outbreak of war, the ministries resigned on the somewhat contradictory grounds that Congress was wedded to non-violence, and they would co-operate with the war effort only if India were given complete independence.

The Congress is frequently described as a Hindu party. This is not strictly accurate; the majority of its members are Hindus, it is true, but it includes some Muslims, Christians, Sikhs and Parsees. But since the advent of the Mahatma, it has become more definitely Hindu in its inspiration, though still claiming to represent the whole nation. Its somewhat amorphous character has brought about curious results. Some Hindus consider it is not Hindu enough; some non-Hindus regard it as too Hindu. In consequence, communal parties have grown up.

Thoughtful Muslims who were alarmed at the predominantly Hindu character of Congress, began to think in terms of a separate Muslim political organization. In the first decade of the present century, the British wished to advance political freedom in India by

developing representative legislative councils. This further alarmed the Muslims who saw themselves condemned to a perpetual minority position always outvoted by the far larger Hindu community. They therefore asked the British Government to allow the Muslims separate representation through special Muslim constituencies. In 1906 the Muslim League was formed to protect Muslim interests and to press this demand for communal constituencies. In 1909 the British accepted the principle of communal representation in the reforms which set up representative institutions. Politics has moved on communal lines ever since.

For the first part of its life the Muslim League was not unfriendly to the Congress, they were united in their demand for Indian independence and Congress was prepared to concede the principle of communal constituencies in order to gain Muslim friendship. But in the twenties Congress became more definitely Hindu in character. Congress policy in the Congress Provinces from 1937 to 1939 further antagonised the Muslims who accused them of favouring Hindus at the expense of Muslims.

The present President of the Muslim League Mr M. A. Jinnah had already come to the fore about 1935. He took advantage of the suspicions created by Congress tactlessness while in office to rally Muslims to the League. In 1940 he dropped his bombshell of Pakistan on the Indian political world. He demanded that an entirely separate sovereign State should be set up comprising the areas with Muslim majorities. This is to be known as Pakistan, literally the land of the pure. * The scheme was enthusiastically adopted by the Muslim League and is now the main plank in their political programme.

It is impossible to say how much support this scheme actually has since no Indian political party publishes accurate figures of membership. All we can say is that League is the best organised and most vocal section of the Muslims.

The Hindu Mahasabha was founded in 1910 by Hindus who felt the Congress was not sufficiently representative of Hindu interests. At first its relations with Congress were cordial, it considered itself the Hindu wing of the Congress and did not function as a separate political organisation.

Gradually the two bodies moved apart. The Mahasabha in particular criticised Mr Gandhi's pacifism and his enthusiasm for a return to village economy. They want to see India strong on modern lines with a powerful army and modern industries. The final break came when war broke out. Congress retired into its shell.

* A reliable Muslim source writes that Pakistan is a word formed of the first letters of the Punjab, Afghan border Area, Kashmir and Sind while stan has been taken from Baluchistan which put together in the above order of names make Pakistan. These are the Areas in which Muslims predominate and which presumably would contribute to the formation of the western parts of the proposed Muslim sovereign state.

the Mahasabha declared for full support of the war. This realistic attitude has won them a great deal of support ; though, as in the case of the Muslim League, it is impossible to say how big the following of the Mahasabha really is. While all these parties are unanimous in their demand for self-government for India, they disagree on the share of each in it.

There are a number of Left-wing parties in India. None of them is of great size or influence, but they represent an interesting departure from the communal and religious parties that have hitherto dominated the scene. Since the bulk of the peasants and workers are illiterate, leadership has fallen almost entirely to the middle class intellectuals. They have considerable influence among students and have a certain hold on the Trade Unions and peasant parties.

The relations of the Left-wing parties with Congress are complex. All are agreed that Indian independence is an essential condition of any further changes they may desire, and for this purpose they have in the past been willing to co-operate with the Congress, which is the main channel for the expression of the desire for national independence. But the sterile policy of the Congress in face of the present world crisis has caused a considerable change of outlook.

The Communist Party was founded in 1924. It worked closely with Congress for many years, and promoted industrial unrest for political purposes. It was declared illegal in 1934 and went underground. But after the attack on Russia in 1941, it declared for full support of the war. The Party was recognized in 1942 as a legal body. Communists within the Congress have tried to persuade it to adapt its policy to the realities of the situation. It is typical of the anomalies of Indian politics that these Communists have not left the Congress in spite of their sharp disagreement with its present policy.

Another group is that of the Congress Socialists. They were started within the Congress in 1934 ; but they were more concerned with nationalism than with economic revolutions. They are opposed to the Communists. Their attitude to the war was in no way modified by the Nazi attack on Russia and the entry of Japan into the war ; they expressed sympathy with China and Russia ; but refused active help.

Another group is that of the Royists, that is to say, the personal following of Mr. M. N. Roy, a former Communist Congressman who has broken with the Congress. His group is small, but it is of interest because Roy was the first of the nationalist leaders to recognize the true nature of the war ; long before the German attack on Russia, he declared for full support of the war. He was also the first Indian politician to stigmatise the Congress as a party of totalitarian leanings bent on preserving the privileges of the capitalist class.

One word of warning ; it is possible to over-estimate the size and influence of these political parties. Their total membership

represents but a fraction of the population. Formerly, Gandhi had an immense following among the peasantry, whose imagination was fired by the picture of the ascetic living like a peasant, but Congress has failed to fulfil the promises of election times and they have lost interest. Politics is mainly an affair of the urban and educated middle classes.

PROVINCIAL AUTONOMY

British political policy in India for the past quarter of a century has been "the progressive realization of responsible government within the Empire", and in pursuance of that policy responsibility has been given to Indians in ever greater measure in successive instalments. The Provinces have been the chief scene of experiments in self government. By the constitution of 1919, power was shared in them between Indian Ministers and officials under a system known as "dyarchy". By the Constitution of 1935, full Provincial autonomy was granted: the Provinces were ruled by Indian Ministers responsible to the elected legislature.

Provincial autonomy marks the highest point reached in the progress towards Indian self government, and to some extent it indicates what may be expected in a fully self governing India. The years 1937-1939 are of special interest, since Provincial autonomy was then functioning in all the Provinces, and in more than half of them was in the hands of Congress Ministries.

The Act of 1935 had provided for fully responsible government in the Provinces, though with certain reserved powers for the Governors as a safeguard against breakdown of government or discrimination against minorities.

Under the Act, Provincial elections were held early in 1937. Now the Indian National Congress, which had for years been the main vehicle for political agitation, condemned the Act as utterly inadequate to fulfil India's aspirations for complete and immediate self government, and it decided to contest the elections for the sole purpose of obstructing the working of the new Constitution. But it also put forward an attractive programme of social and economic reform, with this it won sweeping successes in the elections, winning clear majorities in six Provinces and considerable minorities in the other five. With these successes, it proceeded to put its programme into practice. Congress Ministries were therefore formed in seven Provinces (later increased to eight by the formation of a coalition ministry in another Province), with the double object of implementing the election programme and opposing the Constitution from within. In the other Provinces, coalition Governments were formed and the Congress became the "Opposition" party.

In surveying the working of the Reforms, we must bear in mind that the new Ministries took over a going concern. There was already an efficient administration working in the Provinces; the Provincial Services alone comprise about half a million personnel—all Indian, it may be added. There were also a number of all-India services, partly Indian, on which the Provincial Ministries could draw. There was a large body of law in existence, upheld by a competent judiciary. In the non-Congress Provinces a number of the Ministers had already served under the system of "dyarchy" and were no strangers to administrative responsibility. None the less, there was a feeling in 1937 that a new leaf had been turned: a feeling particularly strong in the Congress Provinces where Ministries new to governmental responsibility took over.

Out of the complicated business of government in India, certain spheres are of particular importance, and by their success or failure in these spheres the Provincial Governments may fitly be judged. These are: the maintenance of law and order, the stability of finance, social reform, the education of the people for democracy, and the promotion of communal harmony.

The past eight years have by no means been free from unrest; there have been peasant disturbances, industrial strikes, gang robberies and murders, outbreaks of communal rioting, as well as the political upheaval of 1942. The Provincial Ministries' capacity for maintaining law and order has been well tested.

There were special problems. In every Province there were a number of political prisoners, the legacy of previous years of political disorder, whose release was demanded by the Congress. Many of the Ministers had themselves served sentences and had long records of opposition to the officials and the police; these were now called on to control the machine which had once put them in prison. The Congress had long denounced all "repressive" measures; Mr. Gandhi himself preached the abolition of coercion and the substitution for it of methods of love and moral persuasion. With such an inheritance, how would the Congress Ministries deal with disorder?

Their record, and that of the non-Congress Ministries too, is excellent. There were only one or two instances where dilatoriness in dealing with rioting led to greater violence than need have occurred had strong measures been taken at the outset. In the main they showed themselves prompt and firm in the face of trouble. They never hesitated to use police, and even troops, when the situation called for a strong hand. Press laws were invoked to suppress incitements to violence. Their handling of disorder differed in no way from that of the previous regime.

The treatment of political prisoners caused some controversy. The general policy was to release those whose activities had been purely political but to keep those convicted of crimes of violence in prison. It is impossible to draw the line sharply, and the releases

resulted in a recrudescence of terrorism in a few places ; but on the whole the policy was carried out with no serious breaches of public peace.

Provincial finances were managed on sound and conservative lines. A few experiments were made, one was the introduction of Prohibition in the Congress Provinces, which involved the sacrifice of an important source of Provincial revenue, the excise on drink. Mr. Gandhi was, however, insistent that this "taunted" source of revenue should be abandoned, and Prohibition was introduced in selected localities in some of the Congress Provinces. To make up for the loss of revenue, new taxes were introduced such as the sales tax and the entertainments tax, which proved very lucrative.

Provincial credit stood high enough for Provincial Governments to raise loans at low rates of interest. These were utilised in orthodox fashion to finance productive works, mainly hydro-electric schemes and major irrigation projects.

One of the strongest arguments for self government in India is that an indigenous government can tackle problems of social reform which, connected as they usually are with religious customs, an alien Government can hardly touch. Growing political control by Indians has already brought about legislation against such practices as child marriage.

Provincial autonomy gave a marked fillip to social reform. Since the election promises of candidates of all parties were largely addressed to the numerous rural electorate, agrarian reform had been promised and many measures of agrarian reform were in fact carried out. Tenancy laws, protecting tenants against the exactions and arbitrary conduct of landlords, were improved in many Provinces, measures of debt relief were also carried through.

The biggest advance was made in education, which under the former regime had got into something of a rut. Under the Congress Ministries an attempt was made to reform village education on more modern and realistic lines. A great drive for adult literacy was also initiated and achieved a fair measure of success. A very satisfactory feature of the adult literacy campaign was the enthusiasm it aroused among voluntary workers, who gladly gave their time and energy to serve the illiterate poor of town and village.

How far the period of Provincial autonomy has proved a period of education for democracy is a debatable point. There is no doubt that the new regime gave the people a feeling that the Government was their own in a sense not experienced before, and the inauguration of Provincial autonomy was greeted with considerable enthusiasm, but this enthusiasm was not canalised into intelligent and constructive criticism. One fundamental weakness was evident in the Congress Provinces: the Working Committee of the Congress kept a very close control over the actions of the Congress Ministers, who were made to

feel that they were more responsible to it than to the electorate. To the extent that the link between Government and electorate was broken, the educative effect of Provincial autonomy was lost.

Unhappily, communal relations in the political field have unquestionably worsened since 1937. The Congress claimed to be a non-communal party open to members of all communities. It also had at the time a larger number of Hindus and Muslims than any other political party. On this basis it claimed to represent the whole of India, and refused to form a coalition with the Muslim League. The Muslim community was thus accorded representation through Congress Muslims who were included in the Cabinets or independent Muslims who were prepared to accept the Congress programme, but the Congress refused to have Muslim League ministers in its Cabinets unless they gave up their connection with the League. This gave rise to suspicion of Congress policy in the Muslim League and it was felt that as Congress membership was overwhelmingly Hindu its policy had a distinctly Hindu flavour. In the new system of education a Hindu bias was given to the teaching of Indian history, a national anthem was introduced which offended Muslim sentiment by comparing the motherland with Hindu goddesses ; the Congress flag was used as a national flag. These things, pinpricks in themselves, led Muslims to suspect that the Congress was attempting to Hinduise India under the guise of uniting it politically ; and they led to strong resentment. When the Congress Ministries resigned, the President of the Muslim League, Mr. Jinnah, proclaimed a Day of Thanksgiving for deliverance from " Hindu tyranny."

If Provincial autonomy has not been the complete success its authors had hoped for it, it can by no means be called a failure. Nor can it be said to have broken down. True that at present in seven Provinces, there is no responsible government ; but this is not because the system failed, but because the ministries, in full possession of their constitutional powers, enjoying the confidence of the legislatures and the support of the Governors of their Provinces, resigned at the dictation of an outside body on an issue unconnected with Provincial affairs. Yet even in the Congress Provinces, the Ministries have no reason to be ashamed of their record of useful legislation, sound finances and efficient administration in the few years they held office.

In two Provinces self-government has gone on without interruption ; in two more it was restored after the resignation of the Congress Ministries on a coalition basis, and recently a Congress Ministry has come into power in the North-West Frontier Province. It is significant that all the Ministries which weathered the storm were Coalition Ministries ; this points to a possible solution of the trickiest of Indian political problems, the reconciling of the communal organization of politics with the processes of Parliamentary democracy. And in these Provinces also the Governments have governed and the Legislatures have legislated.

⁴ Whatever the future may have in store writes Professor Coupland in his masterly survey of recent Indian political history students of politics must needs be impressed by the fact that a parliamentary type of democracy has now been tried out for the first time in great Asiatic countries peopled all together by many millions and that it has for nearly six years successfully survived the trial

INDIANIZATION OF THE SERVICES

In discussions of India's progress towards self government attention is usually directed towards constitutional progress namely the evolution of political control by Indians. Another important aspect is the progressive transfer of the administrative control of the country from British to Indian hands. This aspect has received little attention from foreign observers but its importance has been fully recognised in both India and Great Britain for over a century. It has been given the clumsy but expressive name of Indianization.

There have never been large numbers of British in India. The country has always been administered very considerably through Indians themselves though until quite recently Indians were not given the higher and more responsible posts. As soon as some definite policy emerged from the somewhat haphazard way in which British power was established in India there was a broad intention to associate the people of the country with its administration by giving them opportunities of service under the Government. As the policy of giving India political freedom evolved so did the policy of Indianisation as an integral part of it. There have been in fact two stages in the process of Indianization divided by the war of 1914-1918 the earlier stage of slow Indianization and the more recent stage when efforts were made to hand the administration of the country over to Indian hands as rapidly as was consistent with efficiency and continuity of policy. It was felt that Britain could only implement her promise of self government for India if while building up the political machinery of legislatures and cabinets she also built up a body of experienced Indian administrators who could take complete control of the administrative machinery of the country when the British withdrew.

As is well known the East India Company began as a purely profit making venture but found itself compelled to acquire political control of parts of India to protect its trade. Power brought a sense of responsibility towards the people whom it governed and the British Parliament also interested itself in the territories under the Company's control and insisted on good government. In the Charter Act of

1833, which renewed the Company's privileges, the principle was definitely laid down that no subject of the Crown in India should be disqualified from any place in the Company's service by reason only of his religion, place of birth, descent or colour. It was, however, a long time before this excellent principle was effectively translated into practice.

When the East India Company took over the control of British India, the administration had practically broken down, and it had therefore to build up its own administrative machinery. The higher posts were reserved for the "covenanted" service, civil servants who were brought out from England under special covenants, while the subordinate posts went to the "uncovenanted" service recruited in India. The covenanted servants were nominated by the Directors of the Company, and were of course invariably Englishmen, while in the uncovenanted service there were Englishmen, Indians and people of mixed descent. However, Indians were extensively employed in the judiciary. Nearly all civil cases were tried by Indian judges, and in course of time a number of the higher judicial posts were also given to Indians.

When the control of India was transferred from the Company to the Crown the principle laid down by the Charter of 1833 was re-affirmed by Queen Victoria. By that time some progress in Indianization had been made, though it was slow. There were over 250 Indian officials drawing salaries over £360 a year, and a number holding higher judicial posts.

The real bone of contention was the Civil Service, which evolved out of the old covenanted service of the Company. Its importance lay in the fact that all the higher posts were reserved for its members, so that membership of it was not only a matter of pay but of prestige. Equality of opportunity for Indians to enter and to rise in the Civil Service became a major political objective, as important in the nineteenth century as representation in the Legislative Councils.

As long as the covenanted service was reserved for Directors' nominees there was no chance for an Indian to enter it. It was largely to overcome this drawback that competitive examinations were introduced in 1853. But these at first made little difference, for the examinations were held in England and were based on English school curricula, so that an Indian wishing to sit for the examination had first to go to England for some years to train for it. At that time, too, the difficulties of journey to England were almost insuperable; not only were there difficulties of finance and of sojourning in a strange land, but there were strict injunctions against Hindus crossing the sea, and to defy the ban was to incur social ostracism. Some brave spirits did venture to England, however, and in 1863 the first Indian passed into the Indian Civil Service. A few years later the entrance age was lowered from 22 to 19, making it practically impossible for Indians to go to England for the preliminary training. This

explains why one of the demands of the first session of the Indian National Congress held in 1885 was for "simultaneous examinations" to be held both in India and England

A Public Services Commission appointed in 1886 reviewed the whole question. The superior services were divided into two, the Imperial Service, for which recruitment was made in England, and the Provincial Service, for which recruitment was made within India. The age limit for entrance to the Civil Service was again raised to 22, so that Indians could more easily train for it, and scholarships for study in England were given to Indian boys of merit. None the less, by 1914 only 5% of the Indian Civil Service was Indian, and the small proportion of Indians remained a grievance. Also, though the Provincial service gave Indians an opportunity for well-paid and responsible service to their country, it was always considered inferior in dignity to the Imperial service, and did not satisfy the demand for equality of treatment.

In other services the general policy down to the last war was one of Indian agency under European supervision, with a few exceptional Indians attaining posts in the superior service. In the Police Service especially it was felt that European direction was necessary. One constantly recurring threat to law and order is that of Hindu Muslim rioting which is apt to break out at the time of certain religious festivals, seldom very serious, it nevertheless requires careful handling and is obviously more easily handled by persons not connected with either party. At first superior police officers were appointed from the military services but later candidates were selected through competitive examinations in England. A few appointments, including some of Indians, were made in India.

The Indian Medical Service was for a long time exclusively English, for this also appointments were made in England. But a number of Indian medical students qualified in England and some succeeded in getting into the Indian Medical Service from England.

The service in which responsible posts most quickly got into Indian hands was the Public Works Department. Military engineers were appointed to this service at first, later selection was made both from engineering colleges in England and those in India. In other Services, however,—Education, Forestry, Irrigation, Veterinary Services, the Geological Survey—the same general rule held good of English superior officers and Indian subordinates.

What justification was there for this restrictive policy? How could it be reconciled with the Act of 1833 and Queen Victoria's specific declaration? It may be argued that these promises were mere lip service to the ideal of equality, and that they were in practice cynically disregarded by those who were convinced of their own superiority to Indians and determined to secure for themselves and for their children the plums of service in India. But there were reasons more genuine than these for the very slow rate of Indianization. There

was first of all a marked difference between English and Indian administrative practice. English practice was more impersonal, more subject to impartial rules, than the traditional Indian way of governing. Since the English had set out to govern India on English lines, they wished to associate with themselves only Indians who had imbibed their own principles of government. Those responsible for policy hesitated to flood the services with a large number of Indians who might alter its character. The existence of a communal problem was another stumbling block to rapid Indianization ; Englishmen felt that a stiffening of their own kind was necessary in the various services to ensure " fair-play " between the communities.

Moreover, the technical efficiency of Indians for certain services was frequently in doubt. Very few Indian educational institutions approached the standards of their English counterparts, and Indian qualifications were on the whole considered inferior to English qualifications. Where Indians obtained western qualifications they stood a good chance of competing on equal terms with Englishmen, as in the Indian Medical Service.

The rate of Indianization has been greatly accelerated in the past quarter of a century. During the last war the policy of making India completely self-governing was formally adopted, and the transfer of the administrative machinery to Indian hands was part of that policy. The process has been facilitated by the improvement in education in India, and the growing number of young Indians who have taken high honours in Western Universities and technical institutes, against whom there can be no objection on grounds of inferior technical qualifications.

The superior services were all opened to recruitment in India, and some were destined to become entirely Indian. The Indian Civil Service has been recruited in both countries, but with a progressive increase in the Indian element. At the outbreak of the present war Indians preponderated over Europeans in the Indian Civil Service in the proportion of about 6 to 4. In the police services there are approximately equal numbers of Indians and Europeans. There are still a large number of Europeans in the irrigation service and other specialised services for which Indians with the requisite technical qualifications happen not to be available. But in other services the elimination of the European element is only a matter of time. India, when she comes to full self-government, will find that she has a body of highly qualified and experienced administrative officers of her own nationals to carry on the work of administration.

A closely related question may be discussed here : that of the Indianization of the armed forces. Again, the question only relates to the upper ranks, since the rank and file are Indian.

The Indianization of the army has proceeded more slowly than that of the civil services. Down to the last war, Indians could only hold what were known as Viceroy's commissions, which gave little

more than non-commissioned rank, for the most senior Viceroy's commissioned officer was subordinate to the most junior subaltern holding the King's commission. But during the last war a number of Indians obtained King's commissions.

Indianization of the Army was part of the reforms scheme of 1919. At first, its rate was slow. The beginning was an "eight units" scheme, that is to say, eight Army units were to be provided with Indian officers who would work their way up to the top in course of time. According to this cautious scheme, a whole Division would be Indianized by 1952, and the complete Indianization of the army receded into the dim future. One difficulty was that of obtaining suitable young Indians for training as officers; the traditional avenues of employment for bright young Indians were the Bar and the Indian Civil Service and they were not yet attracted by the idea of military service. The British Officers' training school of Sandhurst was opened to Indians and a few were trained there, in 1932 an "Indian Sandhurst" was opened at Dehra Dun, and a few more suitable recruits came forward. Progress in the Navy was a little faster. The Indian Air Force, however, was purely Indian from the start in 1933; and it is only in view of the war situation that Europeans have been admitted into it at all.

The present war has inevitably brought changes. It has swept away the cautious "eight units" scheme, Indians are being recruited as officers and being trained in India alongside the British in large numbers. But the slow rate of advance in earlier years has left India without a higher military direction, for which she still has to rely on Great Britain, and it will take some years yet before this gap in her services equipment is filled up. Experience in active military service, however, is already hastening the process, India now has more than 200 Indian officers holding the rank of Lieut-Colonel and above, including one Major-General and three Brigadiers. The world crisis has brought home to Indians the importance of defence and has given many young men an interest in a military career.

THE NORTH-WEST FRONTIER

The North-West Frontier of India with its many primitive and warlike tribes and its difficult and in places almost inaccessible terrain presents both political and strategic problems of great importance. Elsewhere, India has definite and easily defensible boundaries ; the sea to the south, the great Himalayan barrier to the north, and the long and all but impenetrable Burmese mountains to the north-east. On the north-west, the tangled mountain country is difficult to attack, easy to defend ; but it has at the same time certain passes through which in the past all the land invasions of India have come.

The Frontier presents three major problems : that of defining the boundaries with India's neighbour Afghanistan, the problem of relations with countries beyond the frontier, and the problem of dealing with the tribesmen who inhabit the mountains on both sides of the border. We shall deal mainly with the last problem since it is peculiar to India ; though relations with the tribesmen take place against a background of possible international complications and military considerations.

The North-West Frontier stretches in an arc for about 350 miles from Chitral in the north to a west point near Wana (see map). The whole area is one of wild and barren mountains which stretch far beyond the border into Afghanistan. The mountains yield little of economic value, while to the east of them lie the fertile plains of the Indus Valley and the Punjab. This contrast between barrenness of their homelands and the rich plains to the east constitutes a continual temptation to the tribesmen to raid and to loot their richer neighbours.

The inhabitants of the North-West Frontier mountains are Pathans, a hardy and war-like stock, Muslims by religion. They are divided into a number of tribes. In the north they are under the control of feudal chiefs who are able to maintain some sort of order. But in the south the tribes have a primitive democracy in which decisions are taken by the tribal "jirga" or assembly, in which each man has a right to a voice, and considers himself free to disregard the "jirga" if he feels so inclined. The result is political anarchy ; though the tribesmen combine for raids or in defence of their territory. Most of the adult men have arms ; each house is a fortress and the villages themselves are fortified. Blood feuds are common.

The area in which the peculiar problems of the Frontier arise has been made into a separate Province. In discussing the problems of the North-West Frontier Province, we must bear in mind three boundaries. One is the boundary with Afghanistan, known as the Durand Line ; this is drawn among the mountains, partly along physical features such as water-sheds, and partly along ethnographic lines.

The same type of country and the same people are to be found on both sides of the line. The second is the boundary with the Punjab Province, which follows the river bed of the Indus for most of its length. The third line, which is indicative of the peculiarity of the Frontier problem, is the "administrative border", which follows the line, strongly defined in that part of the world, where the foothills meet the plains and the river valleys debouch on them. This marks the boundary between the settled districts and the tribal areas. The settled districts are governed on the pattern familiar throughout British India, with police, law courts, magistrates, taxes. The tribal areas with their three million inhabitants are governed by their own laws and customs by feudal chiefs in the north, and by "jargas" in the south. The essence of the Frontier problem from the administrative point of view is to protect the settled districts from the endemic propensity of the tribesmen to raid, and to prevent offenders from India from taking refuge among the tribesmen.

As soon as British rule extended as far as the mountainous border, in the middle of the 19th century, two schools of thought on Frontier policy developed, one advocated the "forward" policy, the other the "close border" policy. The "forward" policy advocated the conquest of the tribal country right up to the boundaries of Afghanistan, the "close border" policy advocated drawing the boundary at the edge of the tribal areas and closing it to tribesmen.

Neither policy is practicable, both involve the excessive use of force. The "forward" policy would mean an immense military effort in extremely difficult country, and since tribesmen akin to those in India are across the Afghan border and might come to the help of the Indian tribesmen it might easily lead to international complications. The "close border" policy would mean an enormous expense in policing, the border cannot be made watertight and raiders would always slip through the police patrols. It has been found by experience that raiding can only be effectively checked by strong punitive measures, and these mean in effect the abandonment of the "close border" policy.

Both policies were attempted during the latter half of the 19th century, and led to complaints of excessive expenditure and undue diversion of military resources. In the last decade of the century a vigorous attempt was made to push forward British administration among the unruly tribes, but it led to tribal uprisings and huge military expenditure. At the beginning of the present century a new policy was attempted. This involved a changed attitude towards the tribes, they were to be persuaded to do their own policing and to control their own bad characters. At the same time the Government would help to improve their economic life but would keep sufficient force in reserve to punish all outbreaks. There would be inducements to an orderly life on the one hand, fear of punishment on the other—or to quote a Patban proverb "a lump of *gur* (unrefined sugar) in the one hand and a stone in the other."

NORTH-WEST FRONTIER PROVINCE

English Miles
0 10 20 40 60 80

 Settled Districts



Such a policy could only be carried out by men thoroughly familiar with tribal life and customs, and special officers known as Political Agents were appointed who studied the language, lived on the Frontier, and knew their tribesmen inside out

Inducements to good behaviour are many. Annual payments are made to friendly tribes. A militia paid by the Government has been raised to support the activities of the Political Agents. The tribesmen are given access to British India, and the opportunity to obtain employment in the armed forces and the police. At the same time efforts are made to raise the standard of life of the tribesmen, schools and hospitals are erected in the more settled tribal areas, assistance is given to agriculture and irrigation is promoted. The fundamental aim of these measures is to change the attitude of the tribesmen to Government, so that they will regard it as friend and helper rather than as a foe to be fought at every turn.

At the same time, however, respect for Government is kept alive by the display of force when it is required. The civil armed forces recruited from among the tribesmen and officered from the regular army are the first line of defence, behind them stand military posts with regular troops to deal with more serious outbreaks of trouble. Methods of exercising force when such outbreaks occur are punitive columns or occupation of the territory of offending tribes, though it must be said that these methods have the effect of reducing the productive capacity of the tribesmen and thus aggravate the economic problem which after all lies at the root of the tribesmen's anti-social activities. In the past quarter of a century, aeroplanes have been used extensively where the geographical conditions permit, normally the patrolling of a single aeroplane suffices to remind the tribesmen of the strength in reserve which will be unleashed if they misbehave themselves. Aerial bombardment of villages which have sent out raiding parties is also an effective form of punishment. Motor roads have also been extended into the tribal areas. These not only facilitate military movements but bring a civilizing influence with them.

Frontier policy for the past forty years has been a slow and wearisome business of civilizing the uncivilized, of creating in people accustomed to anarchy the will to live ordered, peaceful lives. There have been set backs, but on the whole the policy has met with a considerable degree of success. In the north, where the tribesmen are under the control of feudal chiefs, it has been fairly easy to bring about order, for it is a matter of winning over a number of influential men whose own position is strengthened by orderly conditions. In the most northerly part of the Frontier the Malakand Agency where there are three small kingdoms there has been no serious trouble for nearly fifty years, somewhat to the south where power is in the hands of a feudal aristocracy, there has been none since the last war. There are no regular troops stationed in the area except those stationed at the Malakand Pass and the Khyber Pass for strategic reasons.

The chief trouble arises in the area known as Waziristan, where government is by tribal "jirgas" and where anarchy prevails. Here there is almost continual minor trouble; small raids, attacks on posts and patrols, sniping, are part of the ordinary round of life, and there are occasional major outbreaks. As recently as 1936 there was a big outbreak among the most unruly of all the tribes, the Mahsuds, which was not effectively overcome till 1939. At the root of the trouble was the preaching of the fanatical religious leader, the Faqir of Ipi; moreover, constitutional changes in British India gave the tribesmen the erroneous impression that British military power was on the wane, and the younger men of the tribe, bored by long year of peace, were itching for the excitement of a rising. Considerable military operations were necessary to put it down; but they had the merit of convincing the tribesmen that British military power was still a fact to be reckoned with, and of inducing a more reasonable frame of mind. The rising meant some set-back to the constructive policy in this area, but it has now been resumed, and the rapid extension of motor roads during the troubled period has helped the process of pacification.

The frontier problem is not yet solved, but it is in course of slow solution, and its final solution must be left to the Indian Government that will succeed the present Government after the war. But the experience of the past century has shown the need for constructive and beneficent measures that will solve the underlying economic problem, allied with the strong hand which engenders respect for the strength of the civilizing power while the process of civilizing is going on.

THE PRESS IN INDIA

India at the present day has between three and four thousand newspapers written in seventeen different languages. They are of three main types. There are the English-owned newspapers written in English mainly for the English community, but widely read by Indians. There are the Indian-owned newspapers written in English. They usually have a strongly nationalist tone. The best of them have a very high standard and are widely read by British and Indians alike. Then there are the innumerable vernacular papers, some having a high standard and wide circulation, others being small local papers of little importance. Except for these smaller papers, the Indian Press is in general well-informed, informative, and vigorous in tone.

Journalism in India is about a century and a half old, and came to India with the British. The first newspapers were written in English and were purely scandal-mongering society papers, which were severely treated by Government. But in 1812 serious journalism began. A group of English missionaries who were interested in social

reform began the publication of a journal in Bengali dealing with cultural and social topics, and their example was soon followed by progressive Indians, notably the famous Hindu social reformer, Ram Mohan Roy. With men of this type as pioneers, journalism began on a high level. They realised the part that newspapers could play in educating the people and in the social reform movement, and they set themselves to provide high class journals of which the aim was education rather than political controversy. But as the nineteenth century advanced, and educated Indians came more and more under the influence of western ideas, interest shifted to politics. "The opportunity for political discussion", one historian has remarked "and also the example came with British rule". The English edited papers set the example of vigorous criticism of the Government, and the Indian papers followed suit. The foundation of the Indian National Congress in 1885 gave a great impetus to the Indian Press. The interest in education was replaced by an interest in politics, and newspapers began to take a part in political controversy.

Although the Government has for many years been the subject of newspaper criticism, the Press has on the whole been remarkably free from restrictions. This is in accordance with English traditions. It is an underlying principle of English public life that Government ought to be criticised, that criticism will assist statesmen and officials to correct their faults and to rule in accordance with the wishes of the ruled. Hence the English attachment to a free Press and a free Parliament.

As has long been recognized, it is not possible to transplant English institutions to India without modifications, for the historical background and traditions of the two countries are entirely different. This is less true today than a hundred years ago for western ideas have had such a profound influence on India that her institutions and traditions are in many ways beginning to resemble those of the West. But a hundred years ago the Government of India was in a very different position from the Government of Britain. It was foreign, it was responsible to Parliament in England and not to the people of India, it was in charge of a country which was only just emerging from an appalling state of anarchy and violence, in which a firm hand was the only safeguard against a renewed breakdown of ordered government. In these circumstances criticism could not be allowed to run riot. The case for a controlled Press was well put by Sir Thomas Munro, Governor of Madras from 1815 to 1823 who was one of the most ardent champions of Indian self government. He argued that a free Press implied a free people, and that the Press could only act through the people when the majority of them had imbibed the spirit of freedom. In the peculiar circumstances of India, British rule had to be continued until the people were educated for independence, and an unrestricted Press might stir up a spirit of independence and unrest before the people were ready for political responsibilities. Hence he advocated that no political discussion or discussion of controversial religious questions should be allowed.

But there was another point of view, that exactly because there was no Parliament in India to criticise Government, the Press had a special duty to do so. "The only right conception of the office of the Press in India", wrote one newspaper editor to the Viceroy in 1876, "is that of Her Majesty's Opposition." And he hoped that criticism would always be "well-informed and loyal."

This latter view has on the whole prevailed. In earlier years, it is true, Government resented all criticism; a drastic censorship was imposed, and offending English editors were deported without trial to England, sometimes for the most trivial offences. But as the tone of the Press improved, a more liberal policy was adopted, and in 1835 all Press ordinances were repealed. Newspapers had to be registered, and journalists were subject to the ordinary laws of libel and sedition. This was considered enough control. The Press remained free, with only short periods of more rigorous control, such as was found necessary at the time of the Indian Mutiny, for the remainder of the nineteenth century.

But at the beginning of the present century, there was a return of political crime in Bombay and Bengal, and violent passions were fomented by the more extreme section of the Indian Press. This led to the Press Act of 1910, which instituted a more stringent control. "Well-informed and loyal" criticism was still allowed, but incitements to violence and murder were severely dealt with. This Act was kept in force throughout the last war and for a few years afterwards, when an improvement in the situation brought about its repeal. But the supposedly "non-violent" non-co-operation campaign of 1930 brought in its train a renewal of terrorist activity accompanied by unrestrained attacks on Government by the extremist Press, and it was found necessary to reimpose the Act.

The outbreak of the present war led to the imposition of a military censorship of press telegrams entering and leaving India, and to certain restrictions under the Defence of India Rules. Although powers exist for imposing an internal censorship, there is in fact no general censorship on matter appearing in the Indian Press beyond the voluntary censorship exercised by editors themselves. As there was some dissatisfaction with the way in which Press control was working, the editors of the leading newspapers met in conference in 1940, and formed a permanent body to deal with Government. This body, the All-India Newspaper Editors' Conference, meets regularly to discuss all matters of interest to newspapers. As a result of negotiations when it was first formed, certain statutory restrictions on internal news then contemplated were withdrawn, and a consultative system was set up instead. In spite of occasional hitches inevitable in a time of war and disturbance, the system has on the whole worked well, and both Press and Government have co-operated cordially in the delicate matter of military censorship. It has checked the publication of certain classes of news of military significance, but it has not seriously interfered with the freedom of expression of opinion. Leading articles

continue to criticize Government where the editors think criticism is called for, and cartoons to hold high personages up to ridicule in a good natured way. This is all in the English tradition which the Indian Press has adopted, and nobody considers criticism or ridicule to be in any sense disloyal.

In short, a free Press has become thoroughly acclimatised in India by now, and has the vigour of an indigenous plant

SOME LEADING INDIAN NEWSPAPERS

A brief sketch of the character and political complexion of the leading daily newspapers in India will show how vigorous the Press is. Besides the dailies there are also large numbers of weeklies and monthlies. These however are not so widely read and do not influence public opinion in the same way as the important dailies, so that it is not necessary to describe them here.

The best known English owned papers are the *Times of India* of Bombay and the *Statesman* of Calcutta. The *Times of India* has the longest history, it was started in its present form in 1816 but then absorbed a much older paper, the *Bombay Courier*, which was founded in 1790. The *Statesman* can trace its pedigree back to 1831. They are both excellent journals well printed with admirable editorials. They reflect on the whole the British attitude in India. In the main they support Government policies, though they are not in any sense mouthpieces of official policy and at times can be sharply critical of the Government. They are sympathetic to Indian aspirations to self government but prefer constitutional methods to the somewhat destructive tactics of some of the Indian parties.

The chief Indian owned newspapers written in English are the *Hindu* of Madras, the *Bombay Chronicle* of Bombay, the *Hindustan Times* of Delhi, and the *Amrita Bazar Patrika* of Calcutta. These newspapers have strong Congress sympathies, though they are not Congress organs in the sense that Mr Gandhi's little weekly paper *Harijan* was a Congress organ. We may say that the financial interests backing these newspapers are more or less the same as the financial interests supporting the Congress so that it is not surprising to find them sympathetic to Congress. But they can take an independent line. It is a striking thing that while the Congress has officially refused co-operation in the war effort, all these newspapers support the war, are strongly anti Axis, rejoice loudly in Allied victories and give considerable prominence to foreign affairs. Before the war the *Hindu* had correspondents in many foreign capitals and its weekly leaders from London, New York, Prague and Cairo gave Indians a window on the world. Its editorials, written in a stately nineteenth-century English that Englishmen have almost forgotten, remind one of those of the *London Times*.

Before the war the Indian Press as a whole had Congress sympathies, since Congress was the main channel for the demand for fuller self-government. But recently important newspaper critical of Congress policy have sprung up. One of these is the organ of the Muslim League, *Dawn*, published in Delhi, which exists chiefly to publicise Mr. Jinnah's idea of "Pakistan", and to further Muslim interests generally. Another non-Congress paper is the *Liberator* of Madras. In South India the Congress is largely the party of the Brahmins, and there the non-Brahmin Hindus form the chief opposition; the *Liberator* expresses their views. A newspaper of a very different character is the *Vanguard* of Delhi; this is the organ of Mr. M. N. Roy's Radical Democratic Party, a Left-Wing organization, which criticises the Congress as a capitalist party of totalitarian tendencies, and views public affairs from the point of view of their effect on the interests of the workers and peasants.

This tendency to divergence in newspaper publications is a healthy sign; it shows that political thinking in India is vigorous, and also that in spite of war conditions, real freedom of expression exists.

INDIANS OVERSEAS

India, two thousand years ago, was a great colonising country, sending her people far and wide over East Asia, and founding colonies of a distinctly Indian character. But this stream of colonisation dried up round about the 8th century A.D., for reasons which history does not make fully clear. It may be that the Muslim invaders checked the spirit of expansion; it may be that as Hinduism absorbed Buddhism (as it did about this time), the old missionary zeal abated and with it the urge for adventures overseas.

Indian emigration started again in the 19th century, but it was of an entirely different character. Instead of sending out traders, missionaries and conquerors, people of a high culture which stamped itself indelibly on the culture of the countries they visited, she sent out labourers of a humble order to work on the plantations of tropical and sub-tropical countries. These people and their descendants settled in their homes, and have created Indian enclaves with a distinct life of their own which have not been absorbed into the general life of the countries of their adoption. Hence the special problems created by Indians overseas.

The vast mass of Indian emigration has been to countries within the British Empire; a few went to French and Dutch colonies, but the Government of India was not satisfied with the conditions under which Indian labour had to work in these colonies, and withdrew the concessions after a few years. The question of Indians overseas is almost entirely an Imperial question.

The chief countries in which there are large numbers of Indian settlers are those close to India Ceylon Burma and Malaya In Ceylon there are about 800 000 most of whom are estate labourers with a certain number of professional men in Malaya there are about the same number with the same economic functions Before the Japanese occupation there were over a million Indians in Burma these included traders shopkeepers professional men and officials as well as estate labourers About half a million of these made their way to India after the Japanese invasion

Mauritius has 270 000 mostly labourers many have acquired land and are small farmers South Africa has about 225 000 the descendants of indentured labourers and the traders who accompanied them There are considerable numbers in the West Indies Trinidad has 160 000 most of whom are employed as labourers many have become land owners and are prosperous British Guiana has 142 000 mainly engaged in sugar plantations There are smaller groups in other islands Three eighths of the population of the Fiji Islands are Indians (about 100 000) these are mainly agriculturists Indians are to be found throughout East Africa there has been a well established commercial connection between India and East Africa for some centuries Kenya has an Indian population of 45 000 comprising traders professional men and artisans many of the former being very prosperous there are smaller numbers in other East African territories

The recruiting of Indian labour for plantation work began early in the 19th century It was given a stimulus by the abolition of slavery throughout the British Empire in 1835 Since the emancipated slaves were on the whole unwilling to work for wages labour had to be recruited from elsewhere and India with its large agricultural population accustomed to labour under tropical conditions for a low monetary return was a promising field for recruitment

At first the recruitment of labour in India was a personal venture but later the traffic was organized by the importing colonies They appointed emigration agencies these supervised recruiting within India arranged for transport and organized the distribution of labourers between planters in the colonies The labourer was recruited on a definite contract which varied from the ordinary monthly contract to a five-yearly one The long term contract was preferred for the employer was liable to loss if the contract was short and the supply of plantation labour unstable Three to five year contracts were usual On expiry of his contract the labourer could either renew it return home (usually with financial assistance) or settle in the colony as a free man

This was the essence of the system of indentured labour which roused strong criticism in India and was finally abolished in 1916 It was liable to abuse from both sides If the terms of the contract were lenient to the labourer there was danger that he would run away from his work and cause the employer heavy loss If they

were too strict, the employer gained great control over his labourers and was in a position to reduce them to semi-slavery. Indeed, an outcry arose in England in 1838 against indentured labour on the ground that it was only a veiled form of slavery. It was a system that needed the most careful control.

The general policy of the Government of India towards emigration has been one of cautious watchfulness so as to safeguard the interests and welfare of the emigrants. The Government has not at any time definitely encouraged or assisted emigration; its chief activity has been that of controlling the conditions of emigration so as to prevent abuses. When it became clear that the system of indenture led inevitably to abuses, it abolished indentures entirely. It now concerns itself with the welfare of Indians settled overseas.

At first the Government took a laissez-faire attitude to recruitment of labour for overseas; the only stipulation was that prospective emigrants had to appear before a magistrate so that he could satisfy himself they were not being taken to another country against their own will. From 1837 onwards, as the trade in indentured labour increased, a number of regulations were passed to control the traffic; these provided for the licensing of recruiting agents and the registration of recruits, for medical inspection at the ports of embarkation and for their welfare during the voyage.

But the effective control of the Government of India had to stop at the port of disembarkation; it could not enforce regulations once the emigrant had landed, but could only use persuasion with the Government of the importing colonies or as a last resort prohibit emigration altogether. The treatment of Indians in the countries receiving emigrants raised two separate problems: that of their treatment during the period of indenture, and that of their status when they settled in the country (as they usually did) when the period of indenture was finished. The former problem has been lessened as the general standard of labour welfare has risen and improved labour legislation has been passed in the colonies concerned; it is the latter problem that is more permanent and intricate.

Where Indians have settled in considerable numbers they have retained their own way of living and have thus formed a distinct community. This has created the familiar problem of minorities: how far such a minority community can be absorbed into the general community of the country in which it has established itself, and how far it is entitled to full citizenship rights. Controversy arises about the franchise, the right to occupy and own land (an important problem where, as is the case with Indian emigrants, the chief occupation is agriculture and where house property is the traditional form of investment); the right to move freely about the country, the right to enter every trade and profession. In most countries in which they have settled Indians have had to struggle for a recognition of their rights, and inevitably they have looked back to India for help in their struggle. And as long as they did not have full citizenship

rights in the country of their adoption, the Government of India has felt justified in championing their cause.

Official and nationalist opinion in India have been solidly united on the question of Indians overseas. Nationalist opinion has expressed itself both in the Press and in the Legislature, and the Government of India have usually closely followed the policy proposed by Nationalist leaders in Assembly debates. In 1910 an Act was passed through the Legislature empowering the Government to prohibit emigration to any country where Indians did not receive proper treatment. The system of indenture was not entirely swept away at that time; for inquiries showed that in spite of civic disabilities the Indian settler was able to prosper reasonably well and had little wish to return home. But complaints of discriminatory treatment continued; finally, in 1916, the whole system of indentured labour was abolished. Emigration is now only allowed, by the Emigration Act of 1922, on terms laid down by the Government of India and approved by both Houses of the Central Legislature. This control, it may be added, applies only to emigration for the purposes of labour; tourists, merchants and students may of course travel freely. Since 1922 very little emigration of labour has been allowed, though there have been demands for Indian labour from such countries as Fiji and British Guiana. The Government of India now insists on thoroughly satisfactory terms before emigration is permitted.

The present problem then is that of the status of Indians in other parts of the Empire. It must be emphasised that there is no common Empire citizenship. In 1917 it was laid down by the Imperial War Cabinet that each Dominion had complete control of the composition of its own population, though British citizens had the right of entry into any Dominion for temporary visits. An attempt to establish Empire citizenship at the Imperial Conference of 1921 was defeated by South Africa, which argued that the exceptional circumstances of the Union made the proposal unacceptable.

The status of domiciled Indians varies greatly between one Empire country and another. Most of the Crown Colonies admit Indians freely; they have acquired full citizenship rights and are moderately prosperous; some have risen high in the social and economic scale. Kenya is the exception; there a three-cornered problem of the relations between Indians, Europeans and the indigenous population exists, and Indians have so far obtained only a subordinate position. In Ceylon and Burma, where there are large colonies of Indians in keen economic competition with the local inhabitants, relations have not been altogether happy, and there has been a considerable struggle to obtain citizenship rights for Indians.

The most complex problem is that which has arisen in South Africa, owing to the complicated racial composition of the Union's population: Africans, Indians, whites (both Boer and British) and "Cape Coloured" (as people of mixed descent are called).

Four-fifths of the Indians at present in South Africa were born there and know no other home. Most of them are descended from indentured labourers who, between 1860 and 1911, were brought over for the sugar industry of Natal. These labourers were followed by traders who came over as "free men" to cater to the labourers' needs. The indentured labourers for the most part settled in the country after their period of indenture, as agricultural labourers, market gardeners, petty traders. Many worked hard and prospered, and the community has now thrown up its own leaders, lawyers, doctors, teachers, who are well-to-do, well-educated, and prepared to live at the European standard of life.

The Indians in South Africa have always been treated as a separate community subject to restrictions on their freedom of movement, their rights of occupying and owning property, and their right to trade. Their struggle for equal rights began half a century ago, when Mr. Gandhi first made his name. By 1913 he had won for them a partial victory; the poll tax on Indians, a detested discriminatory tax, was abolished, and the Government of South Africa undertook to administer the law justly with regard to Indians. But discrimination went on in various forms, particularly in the attempt to restrict them to certain areas of the Union. In 1926 a Conference was held between the Government of South Africa and the Government of India, as a result of which the Cape Town Agreement of 1927 was signed. By this agreement both Governments recognized the right of the Union of South Africa to uphold the western standard of life; Indians who were prepared to conform to western standards should be enabled to do so; other Indians should be assisted to return to India or some other country where different standards prevailed. The Government of India was to appoint an Agent-General (now styled High Commissioner) to look after the interests of South African Indians.

Of recent years the atmosphere has improved somewhat. The Agents-General chosen have been distinguished Indians, who are able to do much through goodwill and diplomacy to settle questions and smooth over difficulties.

ORGANIZATION OF AN INDIAN DISTRICT

In spite of the recent large strides towards the democratization of Indian Government it still retains much of the paternal character it has had from time immemorial. The Government is the '*ma bah*', the mother and father, of the people. In olden times it was the Raja or Emperor who held the paternal position, who righted wrongs, dispensed justice, gave grants for irrigation works or bridges, and who was always accessible to his people. His mantle has now fallen on the shoulders of that hard working official the District Officer, who, to the hulk of the people is the embodiment of the Government.

The whole of British India is divided up into Districts, each in charge of a District Officer in whom are concentrated the main functions of government. In the eleven Provinces of British India there are 269 Districts, each containing on an average about 4 000 square miles of territory, and something over a million people.

This district organization is inherited from the Moghuls. Under the Moghul Emperors the country was divided into circles for the collection of land revenue and at the head of each circle was a Collector. His functions were largely to assess and collect the land revenue but since he was the representative of the Central Government in the area, he was also responsible for the general administration and for civil justice. When the East India Company in 1763 obtained the right to collect the land revenue in Bengal, they took over in effect the administration of the country. They appointed members of their covenanted service as Collectors in the various districts of Bengal. These, as local representatives of the Company, gradually acquired other powers, particularly magisterial powers and eventually became the Government's chief administrative officers in the districts. The name "Collector" has survived, and is used everywhere except in the Punjab, the Central Provinces and the North West Frontier Province where the terms "Deputy Commissioner" is used.

There is perhaps nothing quite like the system of district administration of British India anywhere else in the world. The day-to-day administration of British India, in such matters as education, health, the promotion of agriculture and industry, the keeping of law and order, is the responsibility of the Provincial Governments. The unit of administration is the district. The various Provincial Departments have their officials in each district, and the work is largely carried out through them. At the head of the district is the District Officer, a person of great power and prestige. He owes his remarkable position mainly to the fact that he combines within himself the functions of

Collector of the Land Revenue and District Magistrate. In practice, he is the Governor of the District.

The Land Revenue might be described as the parent of the Indian administrative system. An elaborate machinery has been built up to assess and collect the Land Revenue. The Collector himself is the chief revenue official. The district is divided into a number of tahsils or taluks, each containing about seventy to a hundred villages, and under officials known as Tahsildars or Talukdars. Each village has its own officials, its headman and accountant, who are responsible for keeping all the records of land tenure and of revenue assessment and payments in their village. The whole of this organization is under the control of the Collector, and through it he can keep in touch with every inch of his district. While the main function of this organization is the collection of land revenue, it can be used for a host of other purposes: for the registration of holdings, the management of indebted estates, the regulation of Government loans, the distribution of famine relief—in fact, everything that touches the life of the agriculturist.

As District Magistrate, the District Officer has considerable judicial powers, and can try cases involving fines up to Rs. 1,000 or up to two years' imprisonment. He supervises the work of the other magistrates in the district. He is primarily responsible for the maintenance of law and order in his district, and in broad matters of policy the police force is under his control.

In order that he may carry out his duties he must keep in close personal contact with every corner of his district, and spends several months of every year in touring round it. Even in these days of good roads and motor cars touring is a strenuous business. Much of the district can only be reached on horseback, and the District Officer has to spend a good many of his nights under canvas in remote villages. But touring brings its reward in the intimate knowledge it gives of the life of the countryside. It is because all the villagers and small townspeople see the Collector on his tours, and can bring their troubles to him personally, that he has won the remarkable position that he holds, and has become for them the "*Ma-bap*", the paternal Government itself.

The Collector keeps in close touch with all the other departments in his district. Each district has a number of departmental heads: the District Superintendent of Police, the District and Sessions Judge, the Civil Surgeon, the District Health Officer, the Executive Engineer, the Inspector of schools. The Collector must be kept informed of their activities except in matter of pure routine, for at some point or other they impinge on his sphere of work. In this way he co-ordinates the activities of all the departments in his district.

In his capacity as District Magistrate, his relations with the District Superintendent of Police are particularly close, for this

official is his assistant in police matters. The District Superintendent of Police has control of the internal management and discipline of the police force ; but he must take his orders from the District Magistrate in matters of policy. The two officers must therefore keep each other informed of all matters concerning the peace and order of the district ; and in practice they work very closely together.

Before 1919 the District Officer was expected to nurse local self-government. He was Chairman of the District Board, a mainly elected body which looks after local schools, health services, roads and bridges ; in the urban areas he was also Chairman of the Municipal Committee which performed much the same functions. But the mere fact of such an important official being at the head of the body spoilt its chances of developing on democratic lines, and since 1919 unofficial chairmen have been appointed to District Boards and Municipal Committees. But even now the District Officer has to keep in close touch with their doings, since they invariably touch on his responsibilities in one way or another.

The District itself is subdivided for administrative purposes, and each of these sub-divisions reproduces in miniature the institutions of the district. At the head is the Talukdar or Tahsildar, who, like the Collector, is both a revenue official and a magistrate. He is responsible to the Collector, in both capacities. He is expected to know intimately the condition of every village in his taluk or tahsil, and spends a large part of every year in touring and camping. The other services also have their officials in charge of the taluk ; there is usually an Inspector of Police, an Overseer of the Public Works Department, a Medical Officer, a Sub-Inspector of schools, a Sub-Inspector of health, and so on. The taluk headquarters may be little more than a village ; but a good deal of the actual work of the administration is carried on from it.

The District Officer enjoys a considerable social position as well as exercising official power. He is expected to give a lead in all beneficent public activities ; to encourage charity, give his blessing to social work, preside at meetings, give away prizes at the local school or college, act as a judge at cattle shows. Distinguished visitors to the district are usually entertained in his house. During the war the Collectors have had all kinds of additional duties thrust on them, and have of their own accord taken up many more. They have flung themselves into recruiting campaigns, giving invaluable aid to the Army's visiting recruiting officers ; they have helped in the various popular campaigns connected with civilian war effort, such as the collecting of war funds, the raising of war loans, and the "grow-more-food" campaigns. They have been an important part of the new and complex machinery of rationing and price control. Whatever task arises that has to be carried out in every town and village of the country, the District Officer and his network of subordinates are there to do it.

No picture of the District Officer would be complete without sketching in the District Officer's wife. Socially, she is the chief lady in the district. Whether British or Indian, she is usually well-educated. In very many cases she is a power for good and a great help to her husband. She frequently takes the lead in women's activities, such as voluntary associations for maternity and child welfare, Girl Guiding, the local ladies' club, Health Weeks, Baby Weeks. She too has her share of presiding at meetings and giving away prizes. Frequently she accompanies her husband to camp and makes contact with the village women. These ladies play a big though seldom recognized part in the uplift of Indian women.

The British have always relied on Indians for the greater part of their administrative staff, but until recently they retained the higher and more responsible posts in their own hands. Down to the outbreak of the last war by far the greater number of district officials of the various departments were British, and every district headquarters had its little British colony. The District Officers were drawn almost entirely from the Indian Civil Service, who till 1914 were 95% British. But as part of the whole plan of preparing India for self-government, the services are being Indianized, and since 1919 the process has been greatly accelerated. The present proportion of Indians to English in the Indian Civil Service is about 6 to 4, and the Police is officered by Englishmen and Indians in about equal proportions. Engineering, Education, Health, Forestry, Irrigation are almost entirely in Indian hands. In most Districts only one or two British officials remain ; in some, all the higher posts are occupied by Indians. The administrative machinery of the Districts, which means to a large extent the actual administration of the whole country, is already in the hands of Indian nationals ; and when India achieves full self-government after the war, the transition will be made easier by the existence of this smoothly-running machinery.

LOCAL SELF-GOVERNMENT

When the subject of India's progress towards self government is discussed, attention is usually directed towards the big political issues of national government and the control of the central and provincial executives and legislatures. There is another field of governmental activity in which Indian self government has gone far beyond the stage of experimentation namely local government. A study of it is of interest in relation to the broader questions of national government which are as yet unsettled.

For three-quarters of a century British policy in India has fostered local self government. The policy was regarded not simply as an administrative measure, a means of getting certain things done, but as a great measure of political education.

In India there is already a long tradition of local self government. India has always been a land of villages, and the ancient Indian village community was practically self governing. It might be said that democracy flourished in the ancient Indian village—a democracy different in structure from modern democracies, but having the essential character of giving the people a voice in and an interest in the affairs that governed their joint lives. Indeed the self governing institutions of Indian villages had such vitality that empires might rise and fall, conquerors come and go, but the real life of the country, centred as it was in the villages, persisted practically undisturbed. Whoever might be king or emperor, village India continued to live its own life and govern its own affairs.

We can get some idea of these ancient self-governing village communities from references in the old epic poems, in law books and political treatises, and from temple records. They give us a picture of groups of the leading men of a village controlling its affairs. These groups are usually known as "*panchayats*", which literally means a group of five. The composition of the *panchayat* varied from village to village, sometimes it consisted of the heads of the chief families, sometimes it was elected from among the elders of the village. We have glimpses too of the "great assembly of the people" deciding cases of theft or murder, though even in these the words of the elders had decisive weight.

The *panchayats* had enormous and for the most part unwritten powers. The elders interpreted the traditional laws and settled disputes; it was laid down in the old Hindu law books that the king himself had to respect the laws and customs of the local groups, be they family, caste or village laws. They were responsible for the cleanliness of the village, for the upkeep of local roads and irrigation works, and for the management of the local temple. When tanks or

roads needed repair, the *panchayat* could call on all the villagers to contribute their own labour or send bullocks and carts for the common task.

Most villages had headmen, who usually held their position by heredity. These headmen were on the one hand the representatives of the villagers in dealings with the central government, and on the other the mouthpiece of the government—though, since they were in no sense dependent on the king for their appointment, they were not government functionaries. The headmen had under him a group of village servants, some of whom, like the watchmen, also held hereditary positions.

Such was the indigenous system of local government. The period of Muslim predominance only served to strengthen it, for as the alien kings disputed for the control of India, the villages were driven in ever more closely on themselves to manage their own affairs. In the towns, however, the Muslim period brought some change, for the rulers appointed city governors, directly responsible to themselves, who not only kept up considerable state but ruled autocratically.

The period of British rule has witnessed a gradual decay of the old village institutions. This is partly due to economic changes; the villages have lost their old self-sufficiency. Barter economy gave way to money economy. But it is also due to the introduction of British methods and ideas of government. The British administration was far more highly centralised than its predecessors, and took upon itself functions which were previously regarded as the affair of the village, such as education and roads. Statute law to some extent replaced the old customary law of the land, law courts replaced the old village tribunals. No wonder that the old system decayed under the pressure of new institutions.

The decay of the *panchayat* was not the outcome of any deliberate policy; on the other hand, as we have seen, the British had the intention of fostering local government. They have attempted to build up local government on the English model, with elected local bodies, local finance and local administration, on the foundations which already existed in the villages.

Local self-government is most highly developed in the towns. The three great Presidency towns of Madras, Bombay and Calcutta, from which British influence has spread, had self-governing institutions almost from the first. Madras was given a municipality as early as 1687, and it is interesting to observe that the local inhabitants were associated with its working not by direct election, but through the heads of the chief castes. Each of these great towns now has its own Mayor and Corporation, responsible for schools, roads, sanitation, lighting and other municipal affairs.

Local self-government in the country towns required more deliberate fostering. Many of them were the headquarters of districts,

each of which was under a Collector, or Deputy Commissioner as he is called in some parts. Almost inevitably the Collector found himself in the position of the former City Governor of Mogul times; but usually he followed the British tradition and secured the co-operation of prominent citizens, such as merchants and heads of castes to assist him in administering local affairs. By 1850 a number of informal and voluntary town associations had been formed, which collected local cesses for such purposes as drainage, street lighting and watch and ward. In that year a Municipal Act was passed permitting the formal establishment of municipalities if the inhabitants wished them. But the municipal committees set up under this act were composed of persons nominated by the Provincial Governments on the recommendation of the Collectors, who still remained at the head of the municipality. In practice there was little "responsible" government in the municipalities; prominent citizens were indeed associated with local government, but the effective direction and the responsibility remained in official hands. There was not, however, any demand for elections and popular control, institutions unfamiliar to India at that time.

In 1882 there was a marked change in policy, aimed at transferring control from official to non-official hands, and making local self-government a means of political education. The English institution of the ballot-box was to be introduced, and it was hoped that the English spirit of real self-government would be created.

In pursuance of this new policy District Boards were set up, chosen as far as possible by election, to deal with local matters. The Collector however was still to be the head of the Board. Local roads, schools, sanitation and public health were the chief matters entrusted to these boards, and they were empowered to collect local cesses to finance their activities. Following the same policy acts were passed requiring a large proportion of the members of municipal councils to be elected, and permitting them to elect a non-official chairman.

But the policy of local self-government has had disappointing results. In some parts of India the experiment has proved successful, but on the whole it has not brought about that education in politics and administration that had been hoped of it. Possibly too much official control was retained and the municipal and district bodies were given too restricted powers to attract the services of patriotic and capable men; possibly the whole machinery of election was too unfamiliar to have much educative value. Local bodies have moreover been hampered by lack of finance; in many cases they have hesitated to impose direct local taxation which would make them unpopular, and have looked to the Provincial Government for financial assistance. Their financial dependence on the Provincial Governments has prevented the growth of a sturdy sense of self-help. It is only in a few places that a real civic pride has developed.

Whatever survives of the old spirit of local life is to be found in the villages. The *panchayats* have lost their old sanction, but

there is still a powerful tendency for the villages to regard themselves as a unit and to settle their own affairs in their own way.

From time to time attempts have been made to revive the *panchayats*. These have chiefly taken the form of linking the *panchayats* up with the State system of justice, and giving them jurisdiction in petty cases and the power to act as arbitration committees. But the whole spirit and method of *panchayats* is so different from the State machinery of justice that these attempts have had but little success. The *panchayat* is informal. There is no constitution, no procedure, no written law, no voting or majority decision; results are obtained by arriving at a consensus of opinion which in fact voices the general sentiment of the village, and the sanction behind the *panchayat* is social pressure. Some success has, however, been achieved in using the services of the village headman in petty civil cases, since he already has a special status as a link with the Government in revenue matters and villagers respect his position.

The problem of local government in India has still to be solved. Its history demonstrates the difficulty of adapting foreign institutions to Indian conditions or of grafting them on to indigenous institutions. It can be said, however, that if local government still remains largely in the hands of district officers, the overwhelming majority of these officers are Indians, so that the machinery which has been evolved can be taken over by a fully self-governing India without a hitch. Possibly the India of the future will evolve a machinery for dealing with local affairs more suitable to the traditions and genius of the people.

PUBLIC HEALTH IN INDIA

Public health work in India has to face peculiar obstacles, especially in the villages. A large proportion of the people are still reluctant to abandon age-long customs and beliefs which help to promote disease and hinder maternity and child welfare work and diet reform. Then again tropical conditions are favourable to the breeding of disease carriers like mosquitoes and rats, and are a cause of rapid spread of disease. "The information furnished for the great group of diseases of world import, *i.e.*, plague, cholera, smallpox, yellow fever, typhus, malaria and dysentery", remarks a Government report on Public Health, "shows that if we except typhus and yellow fever, India is one of the world's reservoirs of infection for the others and the main reservoir for plague and cholera." Add to this the fact that some 40% of the population are definitely undernourished, and it is obvious that India has a vast public health problem.

Public health work was started by the Government of India some sixty years ago, but at first activities were confined to the towns. In 1919 Public Health was entrusted to the Provincial

Governments and the sense of local responsibility gave a stimulus to the work. The Provincial Governments have built up health organizations carrying out a wide programme of work. There is also a central co-ordinating authority under the Commissioner for Public Health and a Central Advisory Board of Health in which all the Provincial Governments co-operate, and which draws up valuable reports on specific problems. Another all India organization is the Indian Research Fund Association, an independent body financed largely by Government, which carries on medical and nutritional research.

As in most countries, a considerable amount of work is done by voluntary bodies which often act as pioneers in certain directions. Most of the Maternity and Child Welfare work is under the control of voluntary organizations. Every kind of Rural Reconstruction organization engages in public health work, especially in sanitation and diet reform propaganda. There are social organizations for special problems. One is the Tuberculosis Association of India started in 1937, which owes so much to the personal interest of Lady Linlithgow. Another is the Leper Relief Association. Very important is the International Health Organization of the Rockefeller Foundation, this has financed research schemes, but its most significant work is the building up of rural health units. One happy feature of public health work in India is the co-ordination between Government and private bodies which prevents overlapping and waste.

In discussing the work that is being done in India, we must remember that the vast bulk of the population lives in 700,000 villages, and the limited resources of the country have so far made it impossible to cover them all. It has been possible only to build up a skeleton organization which is slowly spreading over the country, but which can and does expand to deal with crises such as famine and epidemics. Work is also being concentrated on certain special areas. This follows the policy suggested by the Rockefeller Foundation, of building up rural health units covering a small area, in which work is done on an intensive scale, which can serve as a model to other areas and also as a training school for health workers.

One important line of work is the prevention of water borne diseases by the protection of water supplies and conservancy work. As elsewhere in Asia the Indian villager is careless about his drinking water, often the village pond serves all purposes, bathing, drinking, watering cattle. And he is primitive in his sanitary habits. Government grants are given to villages to enable them to build protected wells and ponds. Much propaganda for improved sanitation is done, and wherever intensive work is going on, simple sanitary conveniences adapted to village conditions and village finance are installed.

Malaria is responsible for over a million deaths a year, and it is estimated that there are over a 100 million cases a year, representing a vast economic loss. The problem has only been touched as yet, though intensive work in selected areas shows that it can be

overcome. In badly affected areas Government distributes quinine free or at low cost. In the areas selected for intensive anti-malaria campaigns, the malaria rate has been brought down to very small proportions. Anti-mosquito measures include destruction of larvæ by treating ponds with larva-killing substances, filling depressions where water might collect, and weekly spraying of houses to kill adult mosquitoes. Schoolboys will do this last for the fun of it. The whole programme costs less than Re. 1 per head per year; but its success depends on the co-operation of the local people. Once they are educated to take an interest, malaria control becomes perfectly feasible.

Another activity is vaccination, which is conducted on a wide scale. Each Province has its staff of vaccinators. It is not possible to make vaccination compulsory, but all schoolchildren are vaccinated, as are all babies coming to clinics. When an epidemic breaks out few escape the vaccinator. Even illiterate people are beginning to appreciate its importance.

Cholera claims even more victims than smallpox. We have already mentioned the—as yet limited—attempts at preventive measures through water protection and sanitary control. Inoculation is carried out in areas suffering from epidemics. One State, Travancore, which had an appalling epidemic in 1935, entirely eliminated cholera by 1939 by a policy of isolation of infected cases and inoculation. Religious festivals, which attract huge masses of pilgrims, are a major cause of spreading cholera. In one case a successful experiment has been tried, in collaboration with the railway authorities, of the compulsory inoculation of pilgrims as they start on their journey. This has brought down the cholera rate remarkably. Plague is another curse which is being lifted by energetic measures. This has been achieved by rat-killing campaigns in infected areas, by installing rat-proof grain stores and by inoculation. Leprosy is another vast problem. It is complicated by the fact that a less scientific age made it a religious duty to give alms to lepers, who therefore find their disease a lucrative trade in crowded places, and it is difficult to segregate them as ought to be done. Something is attempted by the Mission to Lepers, which maintains a number of leper homes, but complete segregation is beyond the administrative resources of Government without a change in public opinion on the subject.

High rates of infant and maternal mortality present another health problem in India, and a Maternity and Child Welfare Movement has been started to combat it. The Indian Red Cross has taken a special interest in this work and co-operates with the Maternity and Child Welfare Bureau which was set up in 1931 to promote it. In all big centres of population work is now being done for the training of midwives, the instruction of mothers and care of babies. There are over a thousand Child Welfare Centres in the country, some of them maintained by Municipalities and District Boards and others by voluntary organizations. The Indian Army

authorities, assisted by the Indian Red Cross promote Maternity and Child Welfare activities for the wives and children of Indian soldiers, and practically every military station now has its Child Welfare Centre

Much research on disease and health problems is going on in India. The Indian Research Fund Association and the Rockefeller Foundation provide most of the money. The former has its magnificent Research Institute at Coonoor where researches of world wide interest are conducted, particularly on malaria and nutrition. The Government of India with generous assistance from the Rockefeller Foundation, maintains the All India Institute of Hygiene and Public Health in Calcutta, which has laboratories conducting research on a great variety of problems. Both these institutions not only conduct researches but train experts for special problems. Indian Universities have good research sections, and many problems bearing on public health, such as nutrition, biochemistry and sanitation have been investigated in them. Add to this the volume of work going on in hospital laboratories the field work in Rural Health Units and socio economic studies carried out in Rural Reconstruction Centres and it is clear that our knowledge of public health problems and their solution is increasing rapidly.

A body of trained health workers is being built up. For the higher staff there is a Diploma of Public Health, which can be gained at the Calcutta Institute. For the large number of health visitors malaria experts, sanitary inspectors, midwives, who do the daily work among the people, there are a number of special schools mostly maintained by the Provincial Governments. But the number of trained workers is as yet too small compared with the size of the country and the need.

The main difficulty about the public health problem is education. Health education is growing in India, all organizations interested in the question are co-operating. The Indian Red Cross Society, for instance issues propaganda material, posters, charts, leaflets, which are widely used. Many Provincial Governments have their own material suited to local conditions. Posters and charts are used at fairs and exhibitions, and hung round Maternity and Child Welfare Centres. Every Rural Reconstruction organization co-operates in this work. Health education is spreading in schools, and in many Provinces it is a compulsory subject.

The war has brought unexpected reinforcements to the Public Health Front from the Indian Army. All recruits to the Indian Army are taught the principles of health as part of their training. Very thorough measures are taken to safeguard the health of the Army: mosquito control, protection of water supplies, supervision of cleanliness of food, milks and kitchens, proper sanitary arrangements, proper drainage. The Army has its own Health School for training personnel to carry out health measures. Two million men have therefore been trained in healthy habits during the war. At

the same time a nucleus of trained health workers has been created, whose services will be available for the civilian population after the war.

India still has very high birth and death-rates, and her infantile mortality rate is exceeded by only one other country. These are significant indications for all students of public health questions. But the resources of the enemy have been studied, the plan of campaign has been mapped out, and the army is being trained. Once the war against the Axis is over and the major political problems solved, there will be time and money for this other war against ill-health and early death, and there are good prospects of a great expansion of public health work.

FOOD CONTROL IN INDIA

The Food Department of the Government of India completed the second year of its existence in December 1944. During the first year of its existence it had to face the terrible Bengal Famine of 1943, but in its second year the problem of famine was overcome, rationing was widely introduced, prices were controlled and even somewhat reduced. The wartime food problem, if not completely solved, was in process of solution. The history of the growth of Food Control in India is both interesting in itself, and because it illustrates some of the peculiarly complex problems of administration in India.

Let us glance first at some of the basic facts about food supplies in India. In normal times, India produces practically all her own food. Of the two most important staple grains, she produced 95% of all her rice requirements (26 million tons) and all her wheat requirements (10 million tons). In normal times the deficiency in her rice supplies was made up by imports from Burma, from whom she imported some 2 million tons annually. In addition, she produced some 14 million tons annually of the less important grains, barley, millets and maize, which are either staples or supplementary to the staple grains in some parts of the country. Not every part of the country is entirely self-supporting in food; some regions have a surplus of foodgrains for export, while others—mainly the partly industrialised areas of Bengal and Bombay, and the regions concentrating on crops for export like the West Coast—are deficit areas which depend on other regions to supplement their own locally-grown food resources.

Underlying all problems of food is the population problem. It is a remarkable fact that in the last thirty years the production of the main foodgrains in India has remained practically constant at between 46 and 51 million tons; while between the Census years of 1911 and 1941 the population increased from 311 millions to 388 millions. It has been calculated that if the average diet is 1 lb. of foodgrains a day,

the consumption needs of India are 50.5 million tons annually, while another 4.5 million tons are needed for seed. India's normal food production therefore falls short of her basic requirements and the problem is increasing as the population increases. A local crop failure, the disturbance of transport due to war, the cutting off of overseas supplies can all precipitate a crisis.

For the first two years of the war India escaped the food troubles that beset other countries. Prices rose but so slightly that the Government decided not to institute control. Towards the end of 1941 price rises became marked and with the outbreak of the Japanese war, troubles multiplied. The supply of rice from Burma was cut off. At the same time demand increased: the armed forces, the half million refugees from Burma and elsewhere had to be supplied. Local shortages appeared, some of which were due to local crop failures and some to transport difficulties caused by the unprecedented strain of war conditions on the Indian railways. Monetary conditions contributed to the rise in prices: increased economic activity led to an expansion of the note issue which had some inflationary effect. During 1942 prices rose more sharply and with rising prices came a tendency to hoarding which aggravated the difficulties.

The Government of India kept a watchful eye on price trends and food supplies from the first. In the first three years of the war a number of Price Control Conferences were held to discuss policy as a whole to which Provinces and States sent their delegates.

But the pursuit of a common policy has throughout encountered a major difficulty: the administrative autonomy of the Provinces and States. By the constitutional changes of 1935, the Provinces obtained a large degree of autonomy in internal matters: the States have always managed their domestic affairs with a great measure of independence. The Central Government has no administrative machinery of its own and it can only implement policy by working through the administrative systems of the Provinces and States and these have often proved tenacious of their local privileges and hesitant to sacrifice local interests for the common good.

As the food situation worsened during 1942 attempts were made to control the prices of wheat and sugar and to regulate their supply. In September 1942 the Price Control Conference recommended that a single agency should be set up for civil and military purchases of foodgrains: that private trading between Provinces should be prohibited and that the Central Government should make purchases from the surplus Provinces and distribute them to the deficit areas. Here were the beginnings of the all India plan which developed later.

The Food Department of the Central Government was formed in December 1942 and at once called the first Food Conference. A major question was that of rationing which had been tried in one or two States with a fair degree of success. The Provinces were against its introduction with the exception of Bombay which

introduced a very successful scheme in the following May. They were also against the idea of central control of prices and of purchases. But the Central Government prepared what came to be known as the Basic Plan for all the Provinces and States ; by this the probable surpluses and deficits of the various areas were estimated, with the intention of transferring surpluses to deficit areas. The principle underlying the Plan was that deficiencies should be distributed all over India and the deficit Provinces should not be left to bear the full weight of the shortages. At the second Food Conference, called to discuss the details of the Plan, it was agreed that the Provinces should be responsible for purchases in their own area, and should provide the Central Government with all information about stocks and the general food situation.

The scheme worked, but with difficulty. The surplus Provinces would not accept the Central Government's estimate of how large their surpluses should be ; meanwhile the demand from the deficit Provinces was treble what the surplus Provinces were prepared to give. It was impossible for the Central Government to erect a purchasing organization and impose it on unwilling Provinces. Shortage of transport created further hitches in the scheme. Hoarding increased and large stocks were withheld from the markets.

Then came the Bengal famine of 1943, which shocked the whole of India into taking the food problem seriously and considering it as a whole. In the meantime, the Foodgrains Policy Committee, set up by the Central Government, submitted its report in which it suggested a co-ordinated policy for the whole of India, and this became the basis of Government policy.

The principle of a Basic Plan for the whole of India was retained ; if any differences of opinion arose about the amount the surplus Provinces could give, the matter was to be submitted to arbitration. Secondly, the Provinces were to continue to be responsible for procurement ; a single procurement agency was to be set up in every Province under Government control but using normal trade channels as far as possible. Thirdly, statutory price control of all major foodgrains was to be introduced. Finally, urban rationing was to be introduced in all towns with a population of 100,000 or over. This was regarded as a fundamental part of the co-ordinated plan, and the Provinces and States were urged to take the preliminary steps for the introduction of rationing immediately.

Most countries have found that if price control is to be effective and not to lead to hoarding and profiteering in the black market, it must be accompanied by rationing. In India the difficulties of rationing are so great that for a long time it was considered impossible to introduce it. The number of the small food-producing units is approximately 55 million ; peasants only sell their surplus and it is difficult to measure what they are keeping back for themselves. General illiteracy adds to the difficulty of explaining rationing

schemes to the masses, but is overcome by various means such as the cinema, loudspeakers, and through non official Food Advisory Committees which are formed in every rationing area or town. Since the staple food varies from Province to Province, and even between different classes in the same locality, it is impossible to lay down a uniform scale of rationing on an all-India basis, but in most Provinces and States, the basic ration of cereals such as wheat or rice is 1 lb per adult per day.

The main difficulties have been overcome by the inauguration of food rationing in the urban areas. It will be readily understood that these rationed urban areas form isolated pools into which food grains flow, and since such urban areas have every kind of population from the very wealthy to the very poor, a continual battle against black markets has to be waged. The legal orders governing rationing procedure also cover matters of supplies and prices. It is, therefore, a matter of some achievement for the Government of India, Provincial Governments and State Administrations to be able to inaugurate food rationing on a ration card basis in more than 460 towns covering a population of approximately 43 millions.

The administrative task of food control and rationing has been enormous. The essential feature of rationing is the registration of consumers at authorised licensed supply shops, from which they obtain their regular quota of rationed commodities. This required detailed preliminary investigation by a large staff. In most towns the municipal staff formed the nucleus, but everywhere additional staff had to be recruited. In some towns the aid of school teachers was enlisted. In Bombay and other cities voluntary committees helped in the task of explaining rationing to the illiterate.

Efficient food rationing demands control throughout the whole process of getting food from the producer to the consumer. It involves the purchase of grain from more than fifty five million cultivators, most of them small farmers, its transport, and storage in the big centres; its distribution to registered wholesale dealers, who in turn distribute it to registered retailers. Food is distributed to the consumers through private licensed retail shops, Government-owned grain shops, co-operative stores and factory shops. Although there is Government control throughout, normal channels of trade are used as far as possible under strict supervision.

Grain is the main commodity to be rationed. People are allowed to buy the particular type of grain that they want, the quantity of any one cereal which can be obtained being determined by the supply which is available. It is, however, the policy of the Government to see that the individual adult ration of cereals is not less than 1 lb per day. In some provinces heavy workers of certain defined categories are allowed a supplementary amount up to 50% of the basic ration.

Rationing systems all over the world are open to criticism, chiefly from those wealthy or otherwise favourably situated persons who do

not understand what is meant by "equality of sacrifice." In a country as vast as India some lack of uniformity is inevitable, but much progress has been made in standardising the various rationing schemes, the majority of which now ensure the daily cereal ration of 1 lb.

Rationing has contributed essentially to the solution of India's food problem. It has assured a more or less equitable distribution. It has restored confidence and thus reduced hoarding and its concomitant evil of the black market. By encouraging the release of available stocks, it has made possible control and even reduction of prices. It has helped to overcome Provincial suspicions and lack of co-operation.

India has turned the corner of her food crisis. Although there are still severe shortages in some areas, no part is threatened by famine now. But the long-term problem of fundamental shortages remains; these can only be solved by the reform of Indian agriculture. Something has already been done by the "Grow-more-food" campaign. In the two years of this campaign 12 million more acres have been added to the area under foodgrains, and the production of all foodgrains has been increased by 6 million tons. The Government is already contemplating far-reaching schemes of post-war agricultural reconstruction. It is on the successful working out of these that the final solution of India's food problem must depend.

THE INDIAN ARMY

The Indian Army has long been a great institution. Its foundations were laid in the 18th century, when both the French and the British, who were then struggling for the mastery of Indian trade, developed the practice of building up Indian regiments officered by Europeans and trained on European lines. As the British expanded their rule in India the Indian Army also expanded, until it became the great institution, with great traditions, that it is now.

In pre-war days the armed forces of India were not designed to carry the whole burden of India's defence. Great Britain undertook the responsibility of dealing with what was called the "major danger" of an attack by a Great Power; this implied the protection of the British Navy, which for more than a hundred and fifty years has kept the shores of India free from invasion. The Indian Army was responsible for dealing with the "minor danger" of trouble on the frontiers and threats to internal security. These dangers were very real, if small. The North-West Frontier borders on a mountainous region inhabited by tribesmen whose political and economic organization is as yet primitive; and there is need of a strong hand to guard against actual invasion and predatory raids. Domestic disturbances are not infrequent; they may be due to riots caused by religious fanaticism, or minor wars with tribesmen many

of whom live by raiding and murder. They are seldom widespread or prolonged, but they need something more than police to deal with them. The Army considered necessary before the war to deal with the "minor dangers" was about 200,000. Of these 50,000 were British troops sent from England, and the remainder were Indian troops who were officered mainly by British officers. It is a commentary on the essentially peaceful nature of the British rule in India that this small Army was adequate both for frontier defence and the internal security of a nation of nearly 400 million inhabitants.

But the role of the Indian Army has by no means been confined to police and border duties. From early times it has been realized that the defence of India required the presence of Indian Army troops far beyond India's frontiers. In France, in Egypt, in the Near and Middle East, in Africa, and in the Far East, that Army has fought side by side with brothers-in-arms from Britain and the Dominions. And as in World War I, the Indian Army won a glorious name on many far-flung fields, so in this War it has been engaged in comradeship with the forces of the rest of the Commonwealth and of the United Nations. Their valour has been recognized by the award of many decorations of bravery on the field of battle; men of the Indian Army have so far won 23 V.Cs., of which 20 have gone to Indians.

There are many famous fighting races in India. Before the present war the Punjab was the chief source of recruits, and it has been called "the sword-arm of India." It has indeed great martial traditions. For centuries invaders of India poured through the passes of the North-West Frontier into the Punjab and fought there for the control of India, and fighting is in the blood of the people. Today the Punjab contributes more men to the fighting forces than any other Province. Muslims form a high proportion of soldiers in the Army, but there are also many famous fighting races among the Hindus such as Rajputs, Jats, Maharattas and Dogras. The Sikhs, though numerically small in comparison with other races, are well known for their fighting qualities and provide a high proportion of their manpower for the Army. Recruitment for the combatant ranks of the Army was previously confined to these races; but in the present war recruitment is from all classes and all Provinces, though as far as possible men from the same classes and part of the country are grouped together in the same units.

Great changes have recently been taking place in the Indian Army. They began in the last war. In 1917 India was promised "the progressive realization of self-government", and it was recognized that an essential part of self-government for a country is control of her own armed forces. This brought about the policy of "Indianization", which means the replacement of British officers by Indian officers in Indian units; with a view to placing, in course of time, the entire control of the Army in Indian hands. The process was begun during the last war when a certain number of Indians gained commissions. Since then a number of Indians have been trained

in English Military Schools, and in 1932 an Indian Military Academy was opened to train officers within India. Indianization of the armed forces involved also the development of an Indian Navy and Air Force. An Indian Marine had indeed existed since the beginning of the British connection with India; in 1933 it was reorganized as a modern combatant force and renamed the Royal Indian Navy. The Indian Air Force was begun in 1932, when the first Indian cadets were admitted to the Royal Air Force Training School in England, as the first step in building up a separate Air Force in India.

The threat of totalitarian aggression in the past decade made Britain look to her defences throughout the Empire. In India the question of Army reorganization was examined by a special Commission whose report was issued just before the outbreak of the present war. The chief recommendation was mechanization of the entire Army; the cavalry regiments were to be equipped with tanks and armoured cars; infantry regiments were to have mechanized first-line transport; all artillery regiments were to be mechanized; even the Sappers and Miners were to have mechanized transport and mechanical power tools. (The ancient method of mule transport was kept for a few units—and mules have proved valuable in the Middle East, in Italy and among the Burmese mountains in places where motor transport cannot go). To facilitate this enormous change, which the Indian revenues could not afford, Great Britain made a grant of Rs. 450,000,000 (£38,000,000) to India. The change was begun at once; at the outbreak of war the Indian Army possessed 5,000 motor vehicles of all kinds; by the end of 1940 this number had risen to 30,000 and the number has since more than doubled.

The Commission also recommended that India should be as far as possible self-supporting in military supplies, and a big expansion of ordnance factories was planned. The wartime expansion has far exceeded anything envisaged by the Commission. India has been faced with great difficulties in her industrial expansion; there has been a shortage of skilled labour and of the all-important machine tools, but in spite of this India is now producing a large proportion of her own military supplies and actually has an exportable surplus of certain kinds. She produces something like three-quarters of the articles required by the Army, notably armoured vehicles, though engines are not yet made in India; she is exporting large quantities of ammunition, explosives, Army clothes and boots, and there is every prospect of further expansion.

The Army itself has increased by leaps and bounds. By the time of the Japanese onslaught in December 1941, the Army was nearly a million strong; since then recruiting has soared to about 70,000 a month, there are now some 2½ million men in the Army. When we remember that there is no conscription in India and that this is entirely a voluntary Army, the figures are doubly impressive. The cautious scheme of "Indianization" has disappeared, and the whole Army is being supplied with officers, Indian and British,

wherever they can be found, and they are being trained together in large military academies

The Indian Navy and Air Force are expanding more slowly, owing to the greater difficulty of building up equipment. None the less progress is being made. The small Indian Navy has been increased both by ships built in Great Britain and Australia, and those built in Indian shipyards, and now possesses a considerable number of the smaller and medium ships. They have proved their worth in many an encounter in the Indian Ocean and along the Arakan Coast. The Indian Air Force is being increased as fast as machines can be obtained and personnel can be trained. Pilots and ground staff are being trained in India in considerable numbers and aircraft are coming in from abroad and being assembled in India. The Air Force also has proved its worth in Burma battles.

India is well defended now. She has not only her own armed forces, but soldiers, aircraft and equipment have poured in from Great Britain and the U.S.A. to guard her and to drive her enemies far from her borders.

THE TRADITIONS OF THE INDIAN ARMY

The Indian Army has a magnificent record of fighting in this present war, in the operations in Africa from the conquest of the Italian Empire to the final debacle in Tunisia, in Sicily and Italy, and in the defence of their own Eastern borders, they have shown their bravery and skill. Their record is in keeping with their great traditions, established over the two centuries during which the Indian Army has been built up.

In India there is a very long tradition of fighting, for her history is studded with wars as numerous as those of Europe. In ancient times king fought with king for the hegemony of Hindustan. There were considerable periods of peace when commerce and the arts flourished, but whatever empire was established sooner or later decayed and disorder and fighting again broke out. India for many centuries suffered a succession of invasions mainly through the mountain passes of the North West. From the eleventh century onwards there was a series of conquests by Muslim invaders who each established a dynasty which flourished for a while and then fell. The Moghul dynasty was the longest lived (it flourished for a century and a half), and during its rule the country was more united and at peace than at any other time, but it never extended its rule over the far South, and throughout the period fighting was going on on the borders of the Empire, while its heart was torn from time to time by civil war.

Fighting then is in the blood of the people. But India is perhaps unique in this, that her soldiers in the past have not been drawn from every class in the community but came only from certain classes. The ancient Hindu caste system is largely responsible for this distinction between class and class; fighting was the business of one caste only, and the others looked to it for defence. The caste system, though essentially a Hindu institution, has also affected non-Hindu Indians, who have analogous social institutions.

There is a tradition in India of "serving the ruler". Because the country was until quite recently broken up into a number of units, ever changing their boundaries, no sentiment of unity could grow up, and there was no sense of nationality or of patriotism connected with the idea of India. Such sentiments are of recent growth and are the outcome of the unity that has accompanied British rule, and the teachings of the West. Before they developed, loyalty was to persons rather than to places, to the ruler rather than to the country. Whoever was strong could command service, and once that service was given it was given with great loyalty. Whether the strong man came from within the country or from outside was not of great importance, for alien invaders were soon absorbed. The Moghuls extended their Empire with the help of Hindu soldiers; once the Hindu rulers had been defeated they entered the service of their conquerors and fought loyally in their armies. And when the Moghul power broke up, and the British power was in the ascendant, they served the British as loyally.

The British power has been dominant in India longer than that of any other foreign invader or native dynasty. It has pacified and unified the whole of the land; for though a third of it is still under Indian Princes, they are allies of the British and are not likely to disturb India's internal peace. Moreover, the British power has had far greater administrative resources than any preceding power; it has been helped by modern science, railways, telegraphs, posts, which have helped it to contend with the problems of creating order amid a vast illiterate and diversified population as well as promoting unity. With these advantages the British have been able to make their writ run throughout the whole of the country, as no previous ruler did, and consequently they have been able to build up an army of unique efficiency. They have evoked the very strong loyalty of the fighting men of India and have built up powerful traditions.

The Indian Army originated in the watchmen who were recruited to guard the factories of the East India Company, and who were given some drill and training in the use of arms. In the early days of the Company some British troops were also recruited for garrison duties. It was the French who began the policy of raising local troops and training them on modern lines with European officers. The British followed suit in 1748, and during their long struggle with the French in the 18th century their armies grew considerably.

These eighteenth-century armies were recruited largely from the military adventurers who swarmed all over India at this disturbed time, seeking service with whatever ruler or nobleman offered them wages and booty. Many of these adventurers were Pathans from Afghanistan, some of whom carved out their own domains; others were Arabs. In the Bombay Presidency, the untouchables flocked to the British flag; the armies that defeated the warlike Mahrattas were composed largely of Mahars, a caste of village servants and agricultural labourers. But as the British power established itself, the old fighting races began to make their peace and to take service under the British flag.

The first half of the 19th century was a period of almost continuous fighting. In 1848 the last great battles were fought on Indian soil in the Sikh Wars. With the defeat of the Sikhs the Punjab was added to the British-ruled part of the country and there was peace everywhere. The Sikhs, once they had accepted their defeat, became some of the most loyal supporters of the new power, and soldiers who had fought in the Khalsa regiments now gladly took service under the British. When the Mutiny broke out in 1857, the situation was saved largely by irregular troops raised in the Punjab, often from among the very elements that had been fighting the British a decade ago. It may be added that the Mutiny was the revolt of one part of the Army only, that recruited in the upper plains of the Ganges valley; the coastal armies of Bombay and Madras were unaffected.

The modern Indian Army has thus evolved out of the old traditions of the country. Until the present war, regiments were recruited as far as possible from the same area and from the same clans within that area, so that hereditary pride is added to regimental tradition, and service in a particular regiment often becomes the heritage of particular fighting families.

The classes in India from which the soldiers are drawn are generally the small farmer, the grazier and the landowner. They are quite often people who own their own land, and who have a certain standing apart from their soldiering. Some till only small plots of land, and the money they draw from soldiering is a much-needed addition to their income; others are prosperous farmers, who become soldiers because it is a family tradition, and soldiering is the most honourable career known to them.

A large proportion of the Army is drawn from the North, particularly from the Punjab. It is here that in the past most of the fighting for the control of India took place, as the invaders poured through the passes of the North-West Frontier; and the descendants of the invaders, and of those who opposed them, have not lost their military tradition. Here also the people are on the whole more prosperous than in the South, the food they eat is more strengthening (a diet of wheat and milk instead of the rice diet of the South), and the cold winters have an invigorating effect; the Northern people are on the whole of bigger build and more robust than the Southerners.

During the present war the scope of recruiting has been extended and recruits are taken from all communities and from every part of the country as they volunteer. A very large proportion still comes from the classes and places in which the military tradition is strong : but among those who have won distinction for bravery are men of every part of the country. The youngest fighting arm, the Indian Air Force, as also the Royal Indian Navy, recruits from all over India, and among its fighting heroes are men of Bengal and Madras.

With one exception the Indian soldier has given the British Raj two centuries of loyal service. The bond that unites the Indian soldiers with the British officers is a strong one. The mere payment of a wage cannot explain this bond. Many of the soldiers whom the British first recruited were frankly mercenary in the fully derogatory sense of the term ; they fought for pay and would as cheerfully have fought for another master who paid them better. But many of them were not strictly speaking Indians. The later armies have been recruited mainly from the fighting races of India herself, though some, like the Gurkhas of Nepal and some Pathans from across the border, are still foreigners. They are still volunteers serving for a wage ; but they are not merely interested in their wages. Their loyalty has been partly won by regular pay, good conditions, prompt justice, and sympathy. Every British officer has to learn the language of his soldiers and is expected to study their customs. Religious customs are respected ; for instance when a Sikh regiment goes on the march in peace time the sacred book of the Sikhs, the Granth Sahib, is carried with all honour at the head of the regiment.

But the bond goes deeper. The British have kept the peace throughout India for a century, and in large parts of it for nearly two centuries ; they have done the task that is traditionally expected of a ruler and done it better than any previous ruler. This is their fundamental strength in India ; whatever else they have done or failed to do they kept foreign enemies away and put an end to internecine warfare.

The Indian fighting men, who have their own pride and their own traditions, are glad to serve such rulers. They see no lack of patriotism in serving the British ruler within India. And having given their loyalty, they follow him to those far-flung fields beyond the borders of India, in Africa, in China, in France in the last war, in Italy in this, where the wars that defend the frontiers of India must be fought if the peace of India is to be preserved.

THE ARMY AS A SOCIAL FORCE

In India, as other countries it is recognized that the upheavals caused by the war provide an opportunity for social and economic reform, and there is much discussion of post war reconstruction

A striking feature of these discussions is the enthusiasm of the Indian Army for post-war reconstruction. We usually think of the Army as an instrument of war, and we hear endless praise of the valour of Indian troops. But that is not all that can be said about the Indian Army. Its significance will by no means be over when the fighting stops, and its effects are far wider than the conquest of this or that place or the destruction of this or that enemy unit, important though these military exploits are.

The Army is revolutionizing the lives of two and a half million of our countrymen. It is giving to large numbers of the common people the education and the social discipline that will be necessary for the peace time tasks of reconstruction. India needs mainly two things, promotion of large scale industry, and the rehabilitation of her agriculture. We shall leave aside the first in the discussion not because it is unimportant but because the Army as a social force will mainly touch the villages since the overwhelming majority of the fighting forces are villagers.

With few exceptions Indian villages are poor. Agriculture follows traditional lines, science is not applied to farming, there is no proper seed selection, use of fertilisers or animal husbandry. The people are in the main illiterate, they suffer from undernourishment, malnutrition and poor health. It cannot be said that remedies do not exist for this state of affairs. Much work has been devoted to rural reconstruction by officials, social workers and missionaries. There are agricultural colleges, research stations, demonstration farms, model villages and rural uplift centres. Yet all this activity touches only the fringe of the problem, all but a handful of India's 700 000 villages remain unreformed. These admirable efforts break themselves on the rocks of the villagers' inertia and lack of education. Without education they cannot understand the new methods and will not avail themselves of even those improvements that lie within their grasp. Except where the villager is touched by some mighty stimulus he has not even the desire to improve himself. There is a vicious circle in operation, the country is too poor to afford education, yet until the people are better educated they cannot or will not improve their conditions. What is needed is a stimulus from outside, something that will give the villager a new outlook and a desire to improve himself, and will put into his hands the means and the knowledge by which he can make improvements.

The Army can provide both the stimulus to a new outlook and the necessary education to make improvements possible.

To understand the effects of Army life, let us picture what happens to a recruit in his first year of training. Picture him as he is when he first arrives from his village at the Recruits' Depot. He has hitherto known nothing except his village. From early childhood he has worked, first in tending the cattle, later in tilling the fields. The nearest school was in the next village; he is quite illiterate. (The literate recruits are usually taken for technical training or for the mechanised branches.) His education has consisted in absorbing the traditional lore of his village; it has given him the culture and dignity of an ancient civilization, but no modern knowledge. He follows traditional methods of farming. His home is a simple mud hut; it is spotlessly clean inside, carefully tended by the women of the family; but outside in the yards and lanes, there is little attempt at sanitation, conservancy or measures to keep down the prevalent flies and mosquitoes. He has shared his drinking water with his cattle at the village tank, running the risk of more disease. His food has been of the simplest. In years of bad harvest there was not enough to go round; he has known privation and even starvation. His family owes money to the village money-lender; meeting the interest is a recurring source of anxiety. His amusements have been few; weddings have provided great excitement, so have religious festivals. He is too young to have taken part in the councils of the village elders, but he knows that there are frequent disputes and factions in the village, and sometimes lawsuits which seem to help nobody.

Let us look at him again after a year in the Army. He has had a year of regular life, a year of Army routine, discipline, of plentiful and nourishing food, of regular exercise and of daily schooling. He has had a year of living at a different and higher standard from that of his village.

Let us consider the physical effect alone. His food has always been adequate; he has been fed on a carefully worked out diet, with sufficient vegetables, meat and milk as well as his staple grain. If his physique was below standard he got extra milk on doctor's orders. The food is clean—kitchens are inspected daily. The vegetables are grown in the depot gardens, and he learns the best methods of growing them from selected seeds. Milk comes from a military dairy farm, where he can see cattle twice the size of his father's tended in a scientific way. His health is properly looked after; ailments big and small, are promptly dealt with. Mosquito nets are compulsory. Water supplies are protected. There is a rigid insistence on sanitary habits, and offenders are promptly punished. The risk of disease is reduced to a minimum. After a year of good food, good health, drill and sport, he has so improved that his own mother would not know him. (This is no exaggeration. It frequently happens that a recruit returning to his village after the seven months of the initial stages of his training, is not recognized by his family.)

Let us take also the mental effect. He has had an hour and a half of school daily as part of his regular training. He has learnt to read and write in Roman Urdu. He has learnt some arithmetic, some geography and history, and a little English. There are books, pamphlets and newspapers which he can read for himself. He has learnt a good deal about handling complicated mechanisms quite foreign to his previous experience, if he showed himself intelligent he may even be driving a car. He has attended study circles organised by the Army Bureau of Current Affairs, the topics discussed may be close to his experience, like soil erosion or agricultural co-operation, or they may relate to China or Russia. He had been encouraged to join in discussions and express his own ideas. All kinds of new recreations have opened up for him, there is the wireless, and the depot gramophone. Concert parties visit the depot, if he has any talent he will find himself performing in a camp concert.

His pay comes to him regularly. He is taught the advantages of thrift, there is an Army Savings Bank in which he can regularly deposit part of his pay.

Better physique, better health, education, discipline, thrift and social cohesion—these are the things that the Army can give the villager who turns soldier.

Much of this can be turned to good account in the village in the days of peace to come. The returned soldier can be the spear head of a rural reconstruction drive. He has seen other things and learnt much that is of use to him in his farming life. Those who have been abroad will have their minds still further broadened. That happened in the last war, many of the Indian soldiers serving in France were immensely impressed by the high standard of living, the industry and thrift of the French peasantry, discovered that hard work brought a worthwhile reward, and set to work hard when they returned to their own villages. The writer had the interesting experience some years ago of helping to conduct a 'Cleaner Villages Competition' in a Punjab district from which there is a heavy recruiting to the Indian Army, and could not but notice that where the village was strikingly clean, where there were paved streets and improved wells, where the co-operative society flourished there was usually a group of ex-soldiers who had put their energy and their savings into the improvements. The Army authorities are now keenly conscious of the part that the returned soldier can play in improving the village. They have set out to educate the soldier for peace as well as for war, the improvement that could be noted in a few villages after the end of the last war ought to be multiplied a hundredfold after the end of this.

It may be added that this village improvement will also affect industrial development. If India's industries are to develop, they must have an assured market, and their best market will be the countless villages of India, if the villagers have a higher standard

of life which will create a demand for whatever Indian industry can supply.

It is true that not all returned soldiers will maintain the high standards they have been taught in the Army ; many will no doubt slip back into the old ways. But there are such large numbers now in the Army that even if only a proportion of them remember what they have been taught and apply it, the War may well prove the starting point of a new way of life in the Indian village.

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